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USSR Report

MILITARY AFFAIRS

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24 January 1984

USSR REPORT MILITARY AFFAIRS

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MILITARY POLITICAL ISSUES

COL GEN SREDIN COMMENTS ON MARXIST-LENINIST DOCTRINE

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 5-8

[Article by Colonel-General G. Sredin, chief of the Lenin Military-Political Academy: "Marxist-Leninist Doctrine on War and the Army"]

[Text]

The question of war and peace is the most outstanding issue of our epoch, on whose solution depends the future of peoples and states, and the destiny of world civilisation. The Soviet Union is fighting consistently to preserve and consolidate peace. The Peace Programme for the 1980s adopted at the 26th CPSU Congress and the Soviet proposals at the nuclear armaments limitation talks chart a real way of delivering mankind from the threat of a thermonuclear war and the burden of the arms race.

Also active on our planet, however, are reactionary imperialist forces headed by the United States of America, which are out to aggravate the international situation, whip up the arms race, and attain military superiority over the USSR and the other socialist countries. As a result of the Reagan Administration's actions, the threat of a military confrontation has grown as never before.

In this context the theoretical problems of war and peace

and the army are naturally becoming particularly topical, the solution of which is provided by Marxist-Leninist doctrine on war and the army.

This doctrine came into being as a natural result of the revolution in the views on society wrought by Karl Marx and Frederick Engels. The founders of Marxism-Leninism contrasted the idealistic interpretation of armed violence and wars and their role in the life of society with a genuinely scientific dialectical and materialistic concepts of the essence and origins of wars, their political content and social character.

Enormous historic merit in further developing Marxist concepts of war and the army belongs to V. I. Lenin, in whose works, along with other highly important problems, much attention is given to questions bearing on wars waged in the imperialist epoch, and the attitude to them of the proletariat, the working masses as a whole, and revolutionary parties.

A scientific analysis of class contradictions and social cla-

shes in the era of imperialism and proletarian revolutions was particularly essential for shaping the proletariat's attitude to wars and correctly comprehending new phenomena in military political practice. The proletariat needed a theoretical weapon for the struggle against predatory imperialist wars, for crushing the bourgeois military machine in the course of the proletarian revolution, and for organising armed defence of socialism. The leader of the proletarian revolution brilliantly solved this task.

Lenin's ideological theoretical legacy, further developed in resolutions of the Communist Party of the Soviet Union, is of invaluable methodological importance in studying military-political problems and further developing the doctrine on war and the army in modern conditions.

The record of history has fully confirmed the correctness of Marxist-Leninist teaching on war and the army.

Among the main components of this teaching are propositions on the origins and

social essence of wars and the relationship between war and politics; the role of war and the army in the contemporary revolutionary process, the relationship between war and socialist revolution, the essence and specifics of wars waged in defence of the Socialist Homeland.

Marxist-Leninist philosophy plays a major role in the development of the doctrine on war and the army due to the fact that it makes up the theoretical core of the world outlook, the universal methodology of cognition and practical activity. The laws, principles and categories of dialectical and historical materialism allow the most essential aspects and regularities in the origins and course of war and also in the construction of the armed forces to be disclosed most deeply and comprehensively.

That is why the doctrine on war and the army is of great ideological and methodological significance in solving the complicated tasks of military construction, strengthening the military power of the army and navy, and training military cadres.

A scientific perception of the essence of wars enables one to grasp correctly complicated military-political phenomena, comprehend deeply the historic necessity to defend socialist gains and to avert the military threat posed by imperialism, and to evolve a correct standpoint as regards attitudes to a specific war. Revealing the essence of war,

Lenin pointed out that it was impossible to understand a given war without understanding the epoch. He stressed that any war must be regarded "as the **continuation** of the politics of the powers concerned — and the **various classes** within these countries — in a definite period," effected by armed violence.

Lenin's definition is fully applicable to global nuclear war, the idea of which is still being entertained by imperialism's reactionary circles. Striving to exempt the imperialists of the responsibility for its preparation, bourgeois ideologists hold that it will not be a means of attaining political goals or a continuation of politics, and will lose its political thrust altogether.

Lenin's interpretation of the essence of war reveals the reactionary character of such assertions. This conclusion is based on Lenin's famous proposition that the deeper a war is politically, the more "military" it seems. A nuclear world war, should it be unleashed contrary to the peoples' will, will be a continuation of imperialism's reckless and aggressive policy.

Wars are alien to the very nature of the socialist social system, for they stem neither from the intrinsic laws of social development under socialism nor from the foreign policy tasks facing the socialist countries. That is why the policy pursued by the socialist states is aimed at eliminating wars from the life of society once and for all. The Soviet people's efforts and aspirations are directed at preventing a world war and averting the very danger of its breaking out. The Soviet Union's policy is supported by all countries

of the socialist community and approved by the popular masses on every continent. Guided by the desire to avert the threat of nuclear devastation and to rule out its very possibility, the Soviet Union pledged not to be the first to use nuclear weapons. This historical action is an outstanding contribution by the Soviet state to the struggle to prevent a global military conflict, outlaw nuclear weapons and achieve real disarmament. This action confirms once again that ensuring peace is the main concern in the USSR's policy.

Also of great ideological importance are Lenin's theses on the social nature and types of wars in the contemporary epoch. In recent years certain bourgeois theoreticians are calling in question the very notion of a just war, because the leaders of imperialist governments never admit that their countries wage unjust wars, as military force alone, not justice, dominates bourgeois society.

Lenin's scientific approach makes it possible to establish real political goals pursued in a war by every belligerent. Lenin wrote that if a war is waged by the exploiting class, it is a criminal war, if a war is fought by the proletariat in the interests of consolidating and developing socialism, it is a just war.

Thus, the social nature of war is determined by the policy it continues, the class it is waged by and the ends aimed at. Viewing from these positions, for instance, Israel's war against sovereign Lebanon and the Palestinian people, waged with the US' direct approval and active aid, it can be said that this war is unjust,

predatory, imperialist and criminal. On the contrary, Arab countries, victims of imperialist aggression, are fighting for the just cause of national liberation.

Marxist-Leninist doctrine gives a correct scientific answer to the problem of war and the origin, the class essence and purpose of the army. An army is an organised association of armed people, created by a state or a class to wage a just or unjust war. The essence of the army lies in its social mission, not in the methods of recruitment or in its organisational structure. An army can be built up on the basis of universal military service, by drawing volunteers or mercenaries or by combining different principles of recruitment, which, undoubtedly, affects its fighting capacity. However, the nature of an army and its essence depend on in whose interests it has been raised and what class it serves. An army may serve not only a single state, but a whole coalition of states; not a single class, but a block of social groups under the aegis of one class. The creation of revolutionary armies expressing the interests of progressive social forces and opposing a reactionary state is a common phenomenon within the contemporary national-liberation movement.

Bourgeois sociologists go out of their way to depict the imperialist army as an institution meeting the interests of the entire nation, and totally dissociated from politics. Lenin resolutely denounced this false assertion, emphasising that "the troops cannot be, have never been, and will never be neutral" as far as class interests are concerned.

Depending on the class essence of armies, it is customary to single out their historical types. At present capitalist (bourgeois) and socialist armies are the main types.

The nature of the armed forces in the states emerged as a result of the peoples' liberation struggle against colonialism is determined by the socio-political system and specific trends in the evolution of home and foreign policies in these countries. Some of them have embarked on the non-capitalist road and are pursuing an anti-imperialist policy, others have opted for the capitalist way of development, which fully predetermines the character and purpose of their armies.

The proposition of Marxist-Leninist doctrine on war and the army regarding the relationship between material and spiritual aspects is of inestimable ideological significance. Pointing to this relationship in contemporary wars, Lenin stressed that "those who have the greatest technical equipment, organisation and discipline, and the best machines will gain the upper hand." This thesis provides a criterium for objectively assessing the armed forces' combat potential. The 26th CPSU Congress emphasised that the combat potential of the Soviet Armed Forces is a durable alloy of high technology, military skill and indomitable morale.

The Marxist-Leninist approach to the interaction between material and moral aspects helps one to perceive the main trends in the development of the military art and link dialectically law-

governed qualitative changes in the evolution of combat equipment, and higher role of man and his moral qualities. Marshal of the Soviet Union D. F. Ustinov, Minister of Defence of the USSR, said that "achieving perfect team-work and learning to handle modern weapons skilfully calls for strenuous effort on the part of the entire personnel. Man was and remains the main force in war."

Marxist-Leninist doctrine on war and the army makes it possible to analyse in a critical way the reactionary nature of bourgeois and revisionist concepts, doctrines and theories which distort the truth of the peace policy of the socialist states and justify imperialism's militaristic and aggressive policy. That is why this doctrine helps expose most resolutely the imperialist advocates of the cold war, who aggravate international tensions and whip up the arms race, thereby threatening to place the world on the brink of a nuclear catastrophe, and is a mighty weapon in the struggle for peace.

Proceeding from the principles of Marxist-Leninist theory, the doctrine on war and the army has evolved specific ideological means of its own—laws, categories and the most important conclusions and generalisations. These have a tangible influence on the development of military theory and practice, directing the activity of military cadres at strengthening the military potential of the Soviet Armed Forces and their combat readiness, and at efficiently training and educating the personnel.

Marxist-Leninist doctrine on war and the army is an ideological and theoretical foundation on which military science

is being developed, military doctrine formulated, and principles of military construction and of readying the Armed Forces and the country as a whole to repel an aggression are based. The decisive influence on the socio-political aspect of Soviet military doctrine is made by the law of dependence of military organisa-

tion on the economy, the state's social system, and the people's attitude to war, formulated by the classics of Marxism-Leninism.

Strong Party spirit and the scientific character of Marxist-Leninist doctrine on war and the army impart to it an acute political thrust, topicality and creativity. The 26th CPSU Con-

gress set the task to analyse political phenomena more resolutely and deeply. Implementing this requirement, Soviet military theoretical thinking is concentrated on problems reflecting the vital interests of the struggle to avert a nuclear world war, to ensure peace and security for the peoples, and to safeguard the socialist gains reliably.

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MILITARY POLITICAL ISSUES

ROLE OF CPSU IN SOVIET ARMED FORCES EXAMINED

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 9-10

[Article by Major N. Gusev, Cand Sc (Philosophy): "Decisive Source of Might"]

[Text]

As soon as the Great October Socialist Revolution triumphed in Russia in 1917 the Communist Party was faced with the task of defending the revolutionary gains of the working people and of ensuring the security of the socialist state against all military attacks of internal and external counterrevolution. V. I. Lenin maintained that this task could be accomplished only with the creation of a Red Army as the main instrument for defending the newly-formed workers' and peasants' state. Military development and ensurance of combat readiness of the Soviet Armed Forces were key lines in the efforts of the Communist Party. In a brief period the country organised a regular army which, as V. I. Lenin put it, was to become the main defender of the working people.

Though they failed to strangle the young Soviet Republic, the imperialists did not abandon their policy of military threats and provocations against the USSR. The Party, naturally, was compelled to build up the country's defence capacity by creating a modern army and navy. The Armed Forces were equipped with new weapons and other materiel. They were provided with competent command and political personnel. The cultural and educational standards of the privates had improved tremendously, too. During the prewar five-year-plan periods the Red Army became one of the world's most advanced armies.

When nazi Germany perfidiously attacked the USSR and the Great Patriotic War broke out, the Communist Party of the Soviet Union did its utmost to organise an effective rebuff on the enemy. Leading the country and the Armed Forces the Party set in motion the Soviet state's mighty forces. It concentrated all of its revolutionary energy

and the efforts of the workers, peasants and intellectuals on victory. The leading and organising role of the Party and its Central Committee manifested itself in mobilisation of the war effort, in the upbuilding of the might of the army and navy and conversion of the national economy to war production. Welded together by a single will, the people and their Armed Forces performed a feat unprecedented in history.

After the war the tasks of military development became more sophisticated. The Party had to cope with a much broader range of political, economic, scientific and purely military problems to fortify the country's defences. The key element in the Party's guidance of the Armed Forces is the formulation of the Soviet state's policy in military matters. The aim of the Soviet state is to create favourable conditions for peaceful development, reliably to defend the countries of the socialist community and ensure their security, and strengthen peace.

The Programme of the Communist Party of the Soviet Union states that "the CPSU considers it necessary to maintain the defensive power of the Soviet state and the combat preparedness of its Armed Forces at a level ensuring the decisive and complete defeat of any enemy who dares to encroach upon the Soviet Union."

The requirements of Soviet military policy are laid down in the USSR's military doctrine. The latter is a system of views on the aims and character of potential war, on the preparation of the country and its Armed Forces for war and also on the methods of warfare.

The Communist Party has accumulated a wealth of experience in the conduct of its military-technical policy. In the late 1930s this policy ensured a rapid growth of the defence industries. During the Great Patriotic War of 1941-45 the Party mobilised the country's material resources for the needs of the front, i. e. the fighting services. Today the Party pays special attention to the technical equipment of the Armed Forces.

Modern military equipment not only makes for the army's and navy's high combat capacity, but also conditions far reaching changes in their organisational structure and in the forms and methods of warfare. The formulation and execution of a single military-technical policy constitute an important line in the Party's guidance of the Soviet Armed Forces.

Today the economy, its level of development, scope of production, and rate of economic growth exercise an ever increasing effect on the expanding potential of the defence industries and on the upgrading of the Armed Forces' material-technical facilities.

The Communist Party efficiently controls this process, drawing on the advantages of the socialist social system. The Eleventh Five-Year Plan (1981-85) provides for rapid development of the key sectors of the Soviet national economy. Planned economic expansion is a guarantee of the Soviet state's growing economic might and rising living standards of the people. It also guarantees that the Soviet Army and Navy will be outfitted with the latest weaponry and other military equipment and will, as in the past, meet the most rigorous combat requirements.

In guiding the Armed Forces the Communist Party displays constant concern for the development of military science on the basis of Marxist-Leninist doctrine on war and the army.

Military science studies the character and specifics of wars and the laws governing their course and outcome; it develops and formulates the principles governing military art and determines the most expedient methods of warfare in a given war. Proceeding from an analysis of the armed struggle which may be thrust on the USSR by the aggressive forces of imperialism, Soviet military science has elaborated requirements for the land and naval forces and produced recommendations for updating means of warfare.

The Communist Party regularly orients military researchers on profound knowledge of the possible character of war, methods of warfare, principles governing the employment of various types of equipment in it, and use of the fighting services and fighting arms.

The Party pays unflagging attention to the selection, distribution and education of leading military personnel. This is not fortuitous. It is a fact that effective guidance of the Armed Forces by the Communist Party largely depends on them. This is so, because every officer, regardless of the post he holds, is not only a military leader, but also a conductor of the Party's policy in the Armed Forces. The officer corps best embodies the Party's requirements of military leaders, namely competence in ideological questions and questions of Marxist-Leninist theory, professional competence, initiative and discipline. Thanks to the efforts of the Communist Party and Soviet Government the Armed Forces of the USSR are adequately provided with well-trained command, political, engineering and technical personnel.

The Soviet Union renders considerable assistance in the training of officers and other military personnel for the armed forces of other socialist countries.

The leading role of the CPSU in the Soviet Armed Forces is manifest in Party-political work

which covers all spheres of life of servicemen and positively moulds their consciousness. The Central Committee of the CPSU guides this work through the Main Political Administration of the Soviet Army and Navy. Party-political work with the men is directly conducted by the political workers and Party activists of the units and sub-units.

Party-political work is actively conducted at all times — in the field, on cruises, at the airfields, during tactical and other exercises, alert duty and execution of combat training missions. Effective Party-political work is promoted by placement of Party and Young Communist League activists at key sectors, organisation of control over assignment execution, and skilful and flexible use of various facilities, forms and methods of political education and instruction.

The Party is playing an increasingly important role in the Armed Forces. This is conditioned by a whole range of factors, such as the aggravation of the international situation caused by the increasingly aggressive policy of the US ruling circles, the greater complexity of the tasks of military development and the need for the further enhancement of the level of ideological and political education of the personnel. Another reason why Party guidance of the Armed Forces acquires greater importance is that the defence of socialism is an international task today, that the Soviet Armed Forces and the armies of the fraternal socialist countries now form a reliable shield of world socialism.

Communist Party guidance covers all spheres of life and functions of the Soviet Armed Forces. The persistent implementation of the Party's policy constitutes the main guarantee of success in Soviet military development, the main source of the Soviet Armed Forces' combat capability. Thanks to the concern displayed by the CPSU, the Soviet Armed Forces are adequately outfitted with all they need for life and execution of their functions. They can immediately administer a powerful rebuff to any aggressor that may infringe upon the USSR's independence.

In carrying out their historic mission of safeguarding the peaceful efforts of the Soviet people the Soviet Armed Forces maintain a high level of readiness for combat. They are a powerful bulwark of universal peace and security of peoples and a reliable deterrent to any military gambles the imperialists and their henchmen may wish to undertake.

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MILITARY POLITICAL ISSUES

SOVIET ETHICAL STANDARDS CONTRASTED WITH U.S.

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 34-36

[Text]

Lieutenant-General Nikolai Dmitriyevich Shevkun has gone through a long and hard school in life. He traversed and fought on the roads of war from Moscow to Prague.

Today Lieutenant-General Shevkun is a Member of the Military Council — Chief of the Political Administration of the Southern Group of Forces. He was a delegate to the 24th, 25th and 26th CPSU congresses. He is a deputy to the Supreme Soviet of the Ukrainian SSR. Nikolai Dmitriyevich kindly granted an interview to a correspondent of "Soviet Military Review" in which he dealt with the active stand in life of Soviet citizens. The text of the interview follows below.

Question: Comrade Lieutenant-General, what does an active stand in life boil down to?

This is not a simple question. Problems bearing on the moral self-perfection of an individual have stirred the best minds of humanity for many centuries. But only in the works of Karl Marx, Frederick Engels and Vladimir Lenin were they elaborated on a sound scientific basis. It was precisely Marxism-Leninism that established the class character of morals and ethics, and their dependence on the type of the socio-economic system.

Capitalist society subjects the individual to political, economic, and spiritual oppression. It fetters the individual's social activity and initiative. For example, is not the working man in capitalist society oppressed by the thought that he can lose his job at any moment? That he may lose his elementary means of subsistence? In a society based on private ownership of the means of production, in a society based on exploitation of man by man all social institutions mould a way of life that suits the needs and interests of the ruling, capitalist,

class. As V. I. Lenin put it, the principle governing this society consists in your robbing somebody, or somebody robbing you, in your working for somebody, or somebody working for you.

Socialist society has introduced and established new, collectivist, morals and ethics. It has placed production and all the achievements of material and spiritual culture at man's service. Karl Marx and Frederick Engels, the founders of scientific communism, formulated the principle: "The free development of the individual is a condition for the free development of all." This principle has been incorporated in the Constitution of the USSR. Since the Great October Socialist Revolution triumphed in 1917 the Communist Party and Soviet Government have invariably worked to improve conditions for the masses, to enhance their political consciousness, occupational training and cultural level. The nationalisation of the big industries and other means of production, abolition of exploitation of man by man, appointment of workers and peasants to executive posts in the Soviets (local government bodies) and economic management bodies, and other measures enabled the working people to acquire a sense of being masters of their country. Socialism has created practical possibilities for the working people to apply their creative abilities and to become involved in public affairs. This has exercised a favourable effect on the individual's stand in life.

A person's stand in life is his set of views on life. Not only views, but also actions which conform to ethical standards of society. An active stand in life is a distinguishing feature of the personality under socialism.

Question: Where does a person's active stand in life manifest itself?

First, in his attitude towards his civic duty. A person's stand in life is active, if he does not shut himself or herself in a shell of selfish, narrow interests, but lives for the interests of society and works in pursuit of these interests. This means that the person places these interests above everything else. He regards his work as part of society's overall effort to build communism. To put it in a nutshell, a person's attitude towards his civil duty under socialism may be briefly expressed in the following terms: "I am responsible for everything."

Second, in that a person's words match his deeds, in that his practical activities do not contradict his convictions. In the USSR we judge people by their concrete deeds, by what they have done and are doing, not by their words or by

what they could have done. In other words, a person's stand in life is affirmed in work, in his attitude towards his job.

Third, in principledness, in intolerance towards negative phenomena, in an exacting approach not only to the results of his work and the work of his comrades, but also to his observance of the standards of socialist community, of standards of behaviour in the collective, in the family and everyday life in general.

Question: Does this apply to Soviet servicemen?

Of course it does.

It should be pointed out that in a society based on private ownership of the means of production the soldier has for centuries been regarded as an element of an efficient war machine designed to fulfil specific functions. This approach to the soldier is still valid in the armies of capitalist countries. Thus, in the US Army the soldier is constantly conditioned to think in a certain way. False concepts and ideas are fixed in his mind to make him react in a way desirable for the ruling class. Implicit obedience and readiness unquestioningly to execute any order are developed in him.

Under socialism military service rejects the idea of a robot soldier or soldier automaton. A person's stand in life, his conscientious attitude towards his military duty are essential elements of army life. Sociological studies conducted in several units have shown that the absolute majority of Soviet soldiers are above all guided by a desire to be useful to the Homeland. For the sake of comparison, I shall quote the results of polls conducted by the US Association for Periodical Publications. Three thousand young Americans were asked the question: "What, in your opinion, is the main thing in military service?" Forty seven per cent answered: "An opportunity to make money."

The US military press has admitted that nearly 20 per cent of the men serving in the US ground forces regularly take drugs and close to seven per cent of the servicemen are confirmed alcoholics. This has caused a sharp rise in crime, acts of violence and absence without leave. Such circumstances are hardly conducive to the adoption of an active stand in life.

The Armed Forces of the USSR are the flesh and blood of the Soviet people. The men serving in the army and navy embody the best features of Soviet people in general. Soviet servicemen enjoy all the rights of Soviet citizens. As distinguished from servicemen in capitalist armed forces

Soviet servicemen share all the socio-economic and political rights of all Soviet people. Just like all other citizens of the USSR they participate in the formation of state power bodies and in the administration of their country. Several thousand Soviet officers and men have been elected deputies to Soviets.

Soviet servicemen are connected with the peoples and armies of fraternal socialist countries by strong bonds of friendship. This friendship is characterised by glorious traditions, it was sealed with blood jointly shed in battles against the fascists.

There has been no other army in the history of mankind whose services to humanity are valued so highly. Carrying out their internationalist duty, the Soviet Armed Forces liberated a number of European and Asian countries from foreign invaders during the Second World War. The peoples of those countries regarded the Soviet serviceman as the man of the new world. He was the embodiment of heroism, nobleness and proletarian internationalism.

Since the war the friendship between the peoples and armies of the socialist community has made further progress. Soviet servicemen love and respect the fraternal peoples. Thus, the servicemen of the Southern Group of Forces temporarily stationed in Hungary have often assisted the Hungarian farmers in gathering the harvest and eliminating the consequences of natural calamities. Soviet combat engineers have actively helped neutralise explosive objects that remained in Hungary since the liberation of the country from the Nazi invaders in 1944-45.

The behaviour of US servicemen outside their own country is in striking contrast to that of Soviet servicemen. Thus, in the last 30 years US servicemen were found guilty of committing 150,000 crimes in Japan. Among these were murder, robbery, rape and illicit trade in drugs.

Question: Comrade Lieutenant-General, would you please give our readers an insight into the development in Soviet servicemen of an active stand in life?

An active stand in life is first formed in the family, at school, and on the job. This process is continued in the army and navy.

The active stand in life of a Soviet person, and of the Soviet serviceman, too, stems from a Marxist-Leninist world outlook which is developed through ideological and political education. The main form of ideological education for privates

and sergeants, seamen and petty officers is political classes. In the number of hours they are comparable to a course in political science at a higher educational establishment.

The whole make-up of military service contributes to the moulding of an active stand in life. Conscientious work performed in line of duty enables the serviceman to display lofty moral qualities and initiative in accomplishing combat training missions.

Combat training is intended not only to gain proficiency in the handling of weapons and other combat equipment, but also to promote activity and a readiness to execute the mission assigned by the commander at all costs. Of course, these aims are secured only if the classes and drills are conducted in keeping with effective methods with due account of modern combat requirements.

The commanders, political workers, Party and Young Communist League organisations make use of the socialist emulation movement in pursuit of these ends. Every participant in this movement seeks to excel his comrade in accomplishing the mission assigned to him. He knows that his experience will be adopted by the others to achieve better overall results. This constant desire to study and work better, to help one's comrades by word and deed in the context of the emulation movement becomes an inalienable feature of the individual. It is like diligence, initiative and mutual assistance.

Inculcation of the spirit of internationalism exercises a most beneficial influence on Soviet servicemen. As was noted at the June 1983 Plenary Meeting of the CPSU Central Committee, the Soviet Armed Forces have always been a splendid school of internationalism. The officers and men of the Southern Group of Forces study the history and the specifics of military development in socialist countries. This reveals to them the social similarity of the Soviet Armed Forces and the armies of the fraternal countries. They learn that these armies have the same aims and tasks.

To cement the friendship and cooperation between the personnel of the Southern Group of Forces and the servicemen of the Hungarian People's Army, they conduct joint tactical exercises and drills with combat equipment. Special evenings are held which are devoted to combat cooperation. At these events Soviet and Hungarian servicemen exchange experience in their military specialities and discuss questions of common interest.

The June Plenary Meeting of the CPSU Central Committee noted that the moulding of an active stand in life in Soviet servicemen is of particular importance in view of the exacerbating ideological struggle in the international arena. Bourgeois ideologists realise that socialism is strong, because the masses of people in the socialist countries are class conscious, because they are conscientious in their work, because they are ardent patriots and because they are imbued with the spirit of proletarian internationalism. That is why the imperialist propaganda machine has spared no effort in its attempts to sap the class consciousness of the peoples of the socialist countries, the young people especially. If a serviceman has developed an active stand in life, he is ideologically stable, he is irreconcilable towards the enemies of peace and progress. He can quickly see through the ideological sallies of the imperialists and can combat them effectively. The commanders, political workers, Party and Young Communist League organisations are doing their best to develop in the personnel an active stand in life.

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MILITARY POLITICAL AFFAIRS

IDEOLOGICAL TRAINING PROBLEMS DISCUSSED

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 37-38

[Article by Colonel V. Zakharchenko: "Readiness for Action"]

[Text]

IDEOLOGICAL STEELING — THE BASIS OF HIGH MORALE

The level of combat readiness of the Armed Forces of the USSR largely depends on the ideological steeling of Soviet servicemen, their morale, combat proficiency and psychological fitness. The entire make-up of army life, the system of training and education helps develop these qualities. The commanders, political workers, engineering and technical personnel mould servicemen characterised by sound ideological convictions, patriots and internationalists who are eager to live up to their civic and military duty in defence of their Socialist Homeland. They are helped in this effort by the Party and Young Communist League organisations.

The army and navy have accumulated a wealth of experience in building up the moral and political education. Let us take, for instance, the company under Senior Lieutenant A. Glushchenko, a graduate of the Moscow Higher All-Arms Command School named after the RSFSR Supreme Soviet. Aware of the fact that ideological convictions constitute the basis of success the com-

mander himself and Senior Lieutenant A. Antipov, deputy commander for political affairs, display constant concern for the development of a sound scientific world outlook in the men. To this end they conduct political education with the aid of forms and methods that have proved their value. At their political classes the men learn what is required of the armed defenders of the Socialist Homeland, they study Lenin's ideological-theoretical heritage, and the decisions of the Communist Party and Soviet Government. Theoretical problems are examined in close connection with practical upbuilding of communism with due account of the missions assigned to the subunit.

Another form of political education is current events reports. These are for privates and sergeants. They are presented to the company and other subunits twice a week in the morning, on days when there are no political classes. A report lasts 30 minutes. Its purpose is to explain to the men the most important decisions of the Party and Government, international events, and the missions assigned to the subunit and unit.

In addition, the company regularly attends lectures about Lenin, question and answer sessions, meetings with veteran members of the Communist Party of the Soviet Union, veterans of the Great Patriotic War (1941-45), advanced workers and prominent people in general. Party and YCL activists effectively contribute to such events.

The Lenin lecture on the topic "V. I. Lenin on the Defence of the Socialist Homeland" was conducted in the following manner. Senior Lieutenant A. Antipov told the men about the difficulties of the early years of the fledgling Soviet Republic, when the ruling capitalist class of 14 imperialist states joined hands with the Russian counter-revolutionaries in an attempt to strangle the government of the people in Russia. Then he read out excerpts from Lenin's speeches and articles in which the leader of the Revolution called on the workers and peasants to defend their Socialist Homeland.

Colonel of the Reserve Anatoly Nikiforov, a veteran officer of the unit, told the men about the courage, valour and heroism the fighters of the older generation displayed in battles against the nazi invaders during the Great Patriotic War.

After that Senior Lieutenant A. Antipov spoke about the privates and sergeants who scored excellent achievements in combat training and political education, who showed good proficiency. These men, he said, had lived up to the behests of the beloved leader.

The men then listened attentively to a recording of V. I. Lenin's speech "Appeal to the Red Army." The lecture ended with a documentary film "Lenin in the Smolny" (Headquarters of the Revolution in Lenin-grad).

CONDITIONS CLOSELY APPROACHING THOSE OF ACTUAL COMBAT

Psychological training is an important element of ideological steeling. The purpose of psychological training is to develop in the servicemen a state of constant readiness for immediate action, emotional stability, will power, courage, bravery, self-control, resolve, and initiative. In his company Senior Lieutenant Glushchenko seeks to create conditions closely approaching those of actual combat. In doing so he tries to make no allowances at all.

In modern combat every serviceman is subjected to terrific physical strain. That is why Senior Lieutenant A. Glushchenko, company commander, and Senior Lieutenant A. Antipov, deputy commander for political affairs, attach special importance to physical training. In doing so they

set an example to the men. The company commanding officer is a candidate master of sports. All the men of his company have badges showing that they have met the norms for the military sports complex. In addition, they have grades in sports. This was not achieved overnight. For instance, everybody remembers when Private V. Leshkov joined the company, he could not even pull himself up on the horizontal bar.

In the beginning Private Leshkov failed to display adequate will power and, hence, persistent effort. During a drill, when the men were being conditioned for a tank assault, he looked at the formidable AFV with obvious fear as it rolled directly onto him. He thought it would be better to crawl away, i.e., to get out of the trench which, he feared, increased the risk. But at that moment the company commander appeared at his side. The officer urged the boy to press himself into the ground as the formidable AFV rushed over their heads. Then the soldier heard the command:

"Throw a grenade at it!" And V. Leshkov wasted no time in doing so.

The ordeal was repeated several times till Private V. Leshkov developed a sense of confidence and realised it was possible to fight the tank.

Today V. Leshkov is a yefreitor. He is also a second grade athlete.

Another effective means for developing daring in the men is the fire-

obstacle course. It comprises a dozen or so obstacles, such as a maze, walls, half-destroyed staircase and a ditch 2.5 metres wide. The men are taught to negotiate the obstacle course to the accompaniment of a simulated roar of battle with whining shells, buzzing aircraft, small-arms fire, etc. The obstacle course teaches the young recruits to act fearlessly and to keep their bearings in action. Having negotiated it three or four times, the men acquire a sense of confidence and act boldly and purposefully.

The knowledge and skills the men acquire at drills in training areas and special grounds are consolidated and upgraded during tactical and other exercises. Many of the objects in the tactical field are fitted with "enemy" incendiary means simulators. Fighting in a populated area the trainees must learn to break into buildings enveloped in flames and smoke, to conduct hand-to-hand combat in them, to extinguish fires in certain cases and to use some of the objects for purposes of defence.

Experience acquired over a period of many years in the training and education of Soviet servicemen has shown that you cannot "steel" or toughen a soldier, unless he is placed in conditions requiring tremendous mental and physical effort. It is only through difficulties and hardships in conditions which most approach those of actual combat that it is possible to mould high moral, splendid fighting qualities and psychological stability that are indispensable for men to secure victory in battle.

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ARMED FORCES

KAZAKH MINISTER NOTES BASIC TRAINING SHORTAGES

Moscow KRSNAYA ZVEZDA in Russian 23 Nov 83 p 2

[G. Ivanov, Lieutenant Colonel, KRSNAYA ZVEZDA correspondent]

[Text] In schools providing a general education, in the full swing of the academic year instructors are summing up the year's first quarter. KRSNAYA ZVEZDA correspondent Lieutenant Colonel G. Ivanov met with the Minister of Education for the Kazakh SSR K. Balakhmetov and asked him a series of questions on the basic military training of students.

[Question] The primary missions in perfecting the military-patriotic education of the rising generation was assigned us by the June CPSU Central Committee Plenum. Kazhakhmet Balakhmetovich, how is this reflected in the organization of basic training in schools and in the attitude toward this subject?

[Answer] Local Party and council agencies are putting more and more attention on the military-patriotic education of youth and their training for the defense of the Motherland. This is positively reflected in the organization of military affairs in schools and the quality of basic training exercises. It is difficult to overrate a military instructor's opportunities in working with young people and upperclassmen. Here is an eloquent example. Last summer twenty-nine graduates from the high school where reserve Lieutenant Colonel Grigoriy Nikitovich Slabinskiy is the military instructor expressed the desire to enter military school. Twenty successfully passed entrance examinations and wear cadet shoulderboards. Schools with well organized basic training receive many testimonials about the pupil's worthy service in units and ship.

This academic year upperclassmen are getting a new textbook entitled "Basic Military Training." The Republic's Educational-Pedagogical Publishing House printed it for mass circulation based on a model sent from Moscow. This is yet one more innovation. In my opinion it is a good educational, methodological handbook for military instructors.

[Question] Military-patriotic education in the Republic specifically includes measures to improve young people's study of the Russian language. How do military instructors feel about this work?

[Answer] They are concerned that pupils in basic training studies solidly master military terminology necessary for soldiers and sailors. Contests on military-patriotic songs and sports games are organized in schools. It goes without saying that this also is stressed during military instructor participation.

[Question] Kazhakhmet Balakhmetovich, who teaches teen-agers military subjects?

[Answer] The instructors are experienced and honored people, many hardened at the front and with long Party service. At Alma-Ata for example, two-thirds of the military instructors are reserve officers who served in the Armed Forces for more than a quarter of a century. Half the military instructors in metropolitan schools have conducted basic training studies for over twenty years.

In one of the schools they respect and value their military instructor retired Lieutenant Colonel Stepan Vasil'yevich Ol'khovik. He fought in the Great Patriotic War and commanded an aviation regiment. Among the veteran's awards are the Order of Lenin, two Orders of the Red Banner, Orders of the Patriotic War 1st and 2nd degree and two Orders of the Red Star. Bearer of the Order of Glory, retired Senior Lieutenant Mukdash Suleymanov works, and works well, as a military instructor in a village school. The words of such people carry a lot of authority with young people.

Many young military instructors deserve a good word. One does not always succeed in finding candidates for the military instructor positions from the ranks of reserve officers in a village district. We invite well-trained reserve sergeants and privates to the schools. Reserve Sergeant Timur Atabayev has worked for several years in the village school in Charyn and he has worked thoughtfully and with initiative.

[Question] Could one say that the problem of military selection in the Republic has been resolved?

[Answer] You can only dream about that. Even in Alma-Ata there are more than twenty vacancies. Shortages of military instructor cadre are sharply felt in the remote regions of the Republic. There have been examples of casual people not noted for high moral qualities or subject matter knowledge being trusted with the primary position of military instructor. Not long ago we punished the director of one school who hired his friend who had a partiality for alcohol to fill one of the military instructor positions.

[Question] If there are no military instructors in a school, does that mean that there are no military affairs studied there?

[Answer] We cannot allow that to happen. We require a full program everywhere. Supernumerary military instructors conduct military studies in such cases and these are often at a high level. In the village of Tankeris for example, the school director, reserve Captain Nikolay Ivanovich Kirzhayev, took on his shoulders all basic training subjects. The school's participation in the All-Union Rally of Military Sports Games "Summer Lightning" and "Eaglet" speak to the quality of their studies. Kirzhayev was awarded the rank of Honor Student of People's Education for the Kazakh SSR.

[Question] You commended several military instructors for initiative. What did this include?

[Answer] It was primarily for improving the training material base, finding effective examples of training and indoctrinating pre-conscription and conscription youth. The military instructor in Issyk high school, reserve Major Leonid Pavlovich Lakhtin, for example, built with the help of his pupils a firing range, radiation fall-out shelter and a parade ground for drilling and an area for developing tactical movement and guard-duty training, and all this without any financial outlay. This in and of itself is a service, but Leonid Pavlovich went further. He introduced the young men and women to the sport of parachuting. In the last four years 120 rated sportsmen have been trained in school. Fourteen graduates entered military pilot training school. Fourteen military pilots from one school. Isn't that really impressive?

Or here is an example of creative research and practical initiative. Military instructor reserve Senior Lieutenant Viktor Petrovich Buzulutskiy organized a technical sports club in the settlement school. The club had several dozen motorcycles and carts made from component parts collected by the young people. After meeting the norms for master of sports, club members, led by the military instructor, participate in the Republic and All-Union competitions. They completed a cross-country motorcycle race that went through the hero-cities and even visited the Far East. This was interesting for the young people and also beneficial. The school was awarded a permanent Challenge Red Banner from the Central Asiatic Military District military council.

Retired Major Valery Fedorovich Bel'kov, Leninogorsk high school imeni N. Ostrovskiy military instructor, attracted students by preparing essays on the most important battles of the Great Patriotic War and on Marshals of the Soviet Union. In a word, there are many examples of initiative and creative work.

[Question] In your view, what disrupts the achievement of high quality and effective basic training studies?

[Answer] An insufficiently developed educational-material base. If I can say so, this is our "Achilles heel." In a significant portion of schools this base does not meet the program requirements. A difficulty which we do not always succeed in overcoming is the closeness and limitation of the school yard, especially in cities. We are building underground buildings and putting

educational supplies in bays. It would be worth supporting the practice of combining the educational bases of neighboring schools. I think that it is time to study the experiences of schools going that route. It is possible to save time, effort and material.

Now the standard model school has the firing range in the basement. But as soon as there is talk about reducing construction costs, they cut the ranges out of the plan. In Alma-Ata three new schools were built, all without ranges. Moreover builders blocked off the basement rooms and ventilator shafts with debris. Military instructor reserve Captain V. Chekanov and Junior Lieutenant S. Putintsev expended a log of effort to equip the ranges all the same.

The College of Ministers adopted a special resolution to perfect the basic training base. This school year they have been checking how the Dzhezkazgan Oblast is meeting its planned program. This will answer a lot of questions.

Asking much from those lagging behind, we are at the same time summarizing the experiences of the best military instructors and foremost schools. We see our primary mission in actively putting this into practice.

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ARMED FORCES

LOGISTIC OPERATIONS OF SOVIET ARMED FORCES PROFILED

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 16-18

[Text]

Logistics of the Armed Forces is a large military economy equipped with sophisticated materiel, various complexes and facilities and intended for logistical and technical supply of the forces. It consists of the units, establishments and subunits which are charged with the following main missions: to constantly maintain stocks of materiel and to ensure uninterrupted supply of the forces with them; to build, restore and service the railway communications; to carry out military transportations; to repair materiel and equipment; to render medical aid to the sick and wounded; to effect trade, quartering and finance support; to render assistance to the forces in rehabilitating and liquidating the aftereffects of the enemy blows.

Logistics of the Soviet Armed Forces was created simultaneously with the Red Army and Navy. Subsequently the perfection of its framework of organisation and technical provision continued.

Logistics of the USSR Armed Forces met with honour the ordeals of the Great Patriotic

War. Under the difficult conditions of the war, it received from industrial enterprises, stored and delivered to the forces over 10 million tons of ammunition, over 16 million tons of fuel, and large quantities of food, clothing and other supplies. Truck transport alone hauled 145 million tons of various cargoes for the needs of the army in the field and the navy. The military rail transportations exceeded 19 million carriages. The road-troops built, repaired and restored nearly 100,000 km of highways. The railway troops and special formations restored over 117,000 km of railway lines which made it possible to deliver to the front some 443,000 operational and supply trains. More than 6,000 airfields were built. Maintenance bodies of the logistical service of the rear and the industrial enterprises of the country repaired dozens of millions of units of weapons and combat equipment. The military-medical service and the medical establishments of the health services returned to the front line following recovery over 72 per cent of the wounded and nearly 91 per cent of the sick. The personnel of the army and navy had

uninterrupted supplies of food, summer and winter uniforms.

The Motherland highly praised the feats of arms of the logistics personnel. Many thousands of servicemen of various subunits were awarded Orders and medals. Fifty-two men were honoured with the high title of Hero of the Soviet Union and more than 30 men with the title of Hero of Socialist Labour.

The contemporary logistics of the USSR Armed Forces disposes of bases and depots with the stocks of supplies of various purpose, railway, automobile, road-building and pipeline troops; auxiliary fleet; engineer-airfield, aviation-technical, repair and rescue, repair, construction, medical, veterinary and other units, establishments and subunits. To ensure the activity of logistics it may also include the units and subunits of engineer and chemical troops; signal troops, air defence and security subunits.

In the system of logistics of the Armed Forces, by the

scale and character of missions to be fulfilled the following links are differentiated: **the strategic rear, operational rear and immediate rear.** By their affiliation — central, front, district, fleet, divisional, regimental and others. Each fighting service has its own logistical agencies.

The strategic rear is the highest link. To it belongs the logistics of the centre including bases and depots with supply stocks; units of special troops, medical and other units and establishments directly subordinated to the USSR Deputy Minister of Defence — Chief of Logistics of the USSR Armed Forces; chiefs of the main and central departments of the USSR Ministry of Defence and the central bodies of control over the logistics of the Armed Forces.

The operational rear includes bases and depots with supply stocks, units of special troops, medical and other units and establishments which are the components of fronts, military districts and formations directly subordinated to the deputy commander for logistics and corresponding chiefs of arms of the service and services of formations. In terms of affiliation it is subdivided into a front, fleet, district and army logistics.

The immediate rear is the final link of the Soviet Armed Forces' Logistics. It includes depots with supply stocks, automobile, medical and other units and subunits (in the Soviet Navy it also includes coastal bases and auxiliary ships). In terms of affiliation it is subdivided into a divisional, bri-

gade, regimental and battalion rear.

Today, what with the further improvement of armament and equipment, development of theory and practice of carrying out combat operations, the principles of organising logistical and technical support of the land and sea forces are continuing to develop. This makes it possible to considerably increase the possibilities of the immediate, operational and strategic rear and demands from its personnel a high technical and military standard, firm knowledge and skills of planning and organising the fulfilment of all missions assigned to the logistical agencies.

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ARMED FORCES

MAR A. I. YEGOROV PROFILED ON CENTENARY

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 46-47

[Article by Lieutenant-Colonel V. Mikhailov]

[Text]

It was the spring of 1919. The Civil War was raging. A grave situation had arisen for the Soviet forces in the south of the country. The forces of the counter-revolution under White Guard General Denikin had launched the offensive. They delivered a blow at the positions of the 10th Army defending Tsaritsyn (now Volgograd). The enemy, taking into consideration the wide frontage of the Soviet forces, tried to cut into their rear. Army Commander A. Yegorov ordered the troops to withdraw to an advantageous line. Having detached two cavalry divisions he formed from them a cavalry corps to cover the main forces. Manoeuvring rapidly the corps delivered several tangible blows at the enemy. When on May 25, 1919 the White Guard troops made an assault crossing of the Sal River in the area of the Pletnyov farm, Yegorov personally led into battle the squadrons of the 6th Cavalry Division. In a short but bloody battle several enemy regiments were routed. During one of the numerous attacks the army commander was seriously wounded but remained on the field of battle.

The battle on the Sal River took a worthy place in the history of the Civil War. For the first time the possibilities of a large cavalry formation were tested in those combat conditions.

For competent troop control and courage displayed in that battle A. I. Yegorov was awarded the Order of the Red Banner.

This victory was not a fluke. Alexander Ilyich Yegorov had already accumulated rich battle and life experience. He was born on October 25, 1883 in the town of Buzuluk (Orenburg region). Upon graduation in 1905 from the Kazan Infantry School he served in the forces. From the beginning of the First World War (1914-1918) he was at the front as commander of a company, a battalion and then a regiment. He was decorated with several Orders.

After the victory of the Great October Socialist Revolution of 1917 Colonel Yegorov aligned himself with the people risen against the monarchy in Russia. From January 1918 Yegorov worked at the Military Department of the All-Russia

Central Executive Committee,* firmly and successfully carrying into life the Leninist plan of building a regular army. Following his suggestion advanced in his report to V. I. Lenin the post of the Commander-in-Chief of the Armed Forces of the Soviet Republic and a united staff attached to him were introduced.

In July 1918 Yegorov joined the Leninist Communist Party. A month later he was sent to the front. He first commanded the 9th Army, and, from December 1918, the 10th Army. That was an extremely grave and difficult time. Fierce fighting was going on along the Southern Front. The Red Army men beat off numerous attacks of the White Guard troops rushing for Tsaritsyn. Frequently one could see a tall, well-built man among the Red Army men. That man was Alexander Yegorov. An experienced and solicitous commander, he was able to raise the men's spirits, to instill in them confidence in victory over the enemy. That was the reason why he paid tireless attention to the Party-political work in units, to the education of the Red Army men in the spirit of devotion to the Party and the people. And it was not fortuitous that the forces under Yegorov were successfully smashing the White Guard troops, frequently gained victories over the enemy superior forces.

In autumn of 1919 a mortal danger hung over the Land of Soviets. Following the capture of Kursk and Voronezh General Denikin's forces were rushing for Moscow. By the decision of the Party Central Committee the best Party and command personnel were sent there. Yegorov was appointed the front commander. He immediately took some necessary measures aimed at increasing the unit's fighting efficiency, at eradicating old-fashioned methods of warfare. In one of the orders of the day the Commander-in-Chief said: "I categorically demand from all army commanders not to move by lines when fulfilling the assigned missions but to deliver concentrated flank blows at the main enemy forces."

In order to hold up the White Guard troops' advance, Yegorov decided to organise cavalry raids in the enemy rear. With this purpose a strike group was formed out of several units. This group operated successfully in the enemy rear.

The second half of October 1919 was a turning point in the situation on the Southern Front. The Soviet forces liberated Oryol and Voronezh and the cavalry of the strike group broke through the enemy front. Taking advantage of the cavalry success, Yegorov ordered the forces to pass over to the general offensive, which soon ended in a complete victory over Denikin.

Early in 1920 Yegorov was appointed Commander-in-Chief of the South-Western Front. Exactly here a new threat hung over the Soviet state. Late in April the troops of bourgeois-landlordist Poland invaded the Ukraine and captured Kiev. The Red Army men of the South-Western Front in severe fighting stopped the enemy and began preparing for

* The All-Russia Central Executive Committee was the supreme body of state power in the country between congresses of Soviets. After the formation of the USSR in 1922 it became the Central Executive Committee of the USSR (up to 1937).

counteroffensive. The Kiev operation (May-June 1920) was elaborated under Yegorov's leadership. A great role was assigned to the large forces of cavalry. The main blow was delivered by the 1st Cavalry Army under S. M. Budyonny. Its mission was to disperse the Kiev and Odessa enemy groupings, to attack him from the rear and thus to ensure the success of all forces of the front.

Despite the fact that the enemy had a 50 per cent superiority over the Soviet forces, on May 26 they passed over to the offensive. Having performed a skillful and quick manoeuvre, the Soviet cavalry proceeded to the area of Zhitomir and delivered a strong blow at the enemy. As a result the front of the invaders was broken through and split into two parts. The attack was also pressed home successfully on the other sectors of the front. During this operation the main enemy forces were utterly defeated.

When the Civil War ended Alexander Yegorov was decorated with an Honorary Revolutionary Weapon. He commanded a number of military districts, took an active part in organisational reconstruction of the army, its technical equipping on the basis of the industrialisation of the national economy.

In 1931 Yegorov was appointed Chief of the Red Army Staff (Chief of the General Staff from 1935). At this post he did much to strengthen the army and navy, to man them with the skilled personnel, and to create powerful armoured troops. He was active in elaborating the radical problems of the theory of Soviet military art and building the Soviet Armed Forces. The theses worked out by Yegorov in 1932, for example, are of great interest even today. They had served as the basis for the "Temporary Instructions On Organising a Deep Battle," which later on were sent to the forces. It was underscored in the theses that the main problem of a contemporary battle is the simultaneous deployment of combat actions to a great depth. Yegorov, in particular, expressed his ideas about the problems of the initial period of a war, about the methods of carrying out breakthrough and its development to the entire depth of the enemy defences. Many points of the theses were used by the Soviet military leaders when preparing and carrying out offensive operations during the Great Patriotic War (1941-45).

Yegorov paid particular attention to carrying out manoeuvres. "Large manoeuvres," he pointed out, "are the basis, so to say, for the expeditious solution of problems, of checking the high command and headquarters. Our superior commanders, staffs, logistical agencies must understand the nature of contemporary manoeuvres, for they are practical means, and sum up our activity for a definite period."

In 1935 Yegorov was among the first Soviet military leaders to be promoted to the rank of Marshal of the Soviet Union. In May 1937 he was appointed Deputy People's Commissar for Defence of the USSR. From 1934 he was elected a Candidate to the Party Central Committee, was a Deputy to the USSR Supreme Soviet of the first convocation. Occupying high posts Alexander Yegorov always remained

an affable and modest man. Marshal of the Soviet Union A. M. Vasilevsky who frequently met Yegorov remembered his disarming smile, his gentle folk humour, his human charm and his particular sincerity combined with the iron will of a military leader.

The life and work of Marshal of the Soviet Union A. I. Yegorov (he died in 1939) is a brilliant example of service to the Soviet people, the Party and the Socialist Motherland.

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ARMED FORCES

T. GLADKOV'S BOOK ON MILITARY LEADERS REVIEWED

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 p 58

[Text]

This is an unusual publication.* It is unusual, first of all, because of its intention. The author, writer Teodor Gladkov, telling the reader about Soviet military leaders, gives an idea of the most important battles of the Second World War, which took place on the Soviet-German front in 1941-1945.

On the cover and in the contents there are seven names — Ivan Konev, Konstantin Rokossovsky, Nikolai Voronov, Pavel Rybalko, Timofei Khryukin, Arseny Golovko, Sabir Rakhimov. None of them are alike, each had his own life and destiny. They differ in nationality, origin and experience, and they held different posts. Yet as the author has stressed, they had much in common: their boundless devotion to the Communist Party and the Soviet people, their active position in life, unity of word and deed, loyalty to their internationalist duty. At each stage of their combat activity during the Great Patriotic War they represented the Soviet people, the same outlook and school of military thought and leadership.

Ivan Konev (1897-1973), Marshal of the Soviet Union. In 1941-45 the "soldier-marshal," as the Soviet

fighting men called him, was forced to serve a gun beating off one enemy tank attack after another and to crawl along the forward line on his belly, he captured Berlin and helped Prague risen in rebellion.

Konstantin Rokossovsky (1896-1968), Marshal of the Soviet Union. Together with Nikolai Voronov, Chief Marshal of the Artillery, he was the first to interrogate Field-Marshal Paulus taken prisoner at Stalingrad. According to the author, "the troops literally worshipped him and he was universally popular. Small boys in the war years played "Rokossovsky" just as their older brothers had played "Chapayev," the legendary divisional commander in the Civil War.

Nikolai Voronov (1899-1968), Chief Marshal of the Artillery. He was one of the first Soviet Commanders to encounter the nazis on the field of battle in Republican Spain (1936-1939) where he fought as a volunteer. It is largely to Nikolai Voronov's credit that the Soviet artillery in the clash with fascism was a genuine "God of war."

Pavel Rybalko (1894-1948), Marshal of the Armoured Forces. After the Civil War (1918-20) serious wounds forced him, a regular officer, to take a military post in the diplomatic service and then to become an army instructor. When nazi Ger-

many perfidiously attacked the Soviet Union he wrote officially seven times to the Supreme Command asking to be sent to the front. Finally his request was granted. Rybalko quickly displayed his gifts as a military leader. His tanks took the enemy unawares, forestalled him and secured the success of the entire operation.

Timofei Khryukin (1910-1953), Colonel-General of the Air Force. He lived a short but a very brilliant life. In 1944 he became the youngest commander of an air army. He went to the "school of hard knocks:" an abandoned child, an unskilled labourer, a loader and a hammerman at a railway depot. He studied hard. Then he fought the fascists in the Spanish skies, and the Japanese militarists in China. Prior to the war of 1941-45 he returned to Moscow as a Hero of the Soviet Union. He was only 30 when he received the rank of Major-General of the Air Force. His participation in the storm of the city-fortress of Koenigsberg in 1945 was the crowning point of his combat career.

Arseny Golovko (1906-1962), Admiral. Under his command the seamen and pilots of the Northern Fleet successfully routed superior enemy forces. They could daringly rush into battle formations of enemy squadrons, to break through directly into enemy ports and to attack and win despite any difficulties.

* T. Gladkov. "They Led the Armies to Victory." Moscow, Novosti Press Agency Publishing House, 1982, 96 pp. (in English, French, German, Spanish, Portuguese, Mongolian and Arabic).

Sabir Rakhimov (1902-1945), General, one of the divisional commanders. In September 1942 on the Tuapse sector in the Northern Caucasus from a diary of a German general killed by the Soviet reconnaissance men Rakhimov "learned" that he was an

Asian heading the Donbass miners. Sabir Umar Ogly Rakhimov was indeed an Uzbek by nationality. He was the first Uzbek general in the history of the Soviet Armed Forces. The life of the heroes of this book has been recreated by the writer on

a documentary basis. The most fantastic inventions grew dim in comparison with this truthful narration about this unprecedented courage and heroism of the Soviet fighting men.

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ARMED FORCES

SOCIALIST NATURE OF SOVIET ARMED FORCES

Moscow SOVIET MILITARY REVIEW in English No 11, Nov 83 pp 8-9

[Article by A. Shevchenko: "The Army of Advanced Socialism"]

[Text]

The Great October Socialist Revolution of 1917 was a turning point in military development. A socialist army is a new type of a state's regular military organisation. It is an army of workers and peasants, an internationalist army. It is the first army in the history of mankind formed to defend the interests of the masses of working people, not of the exploiting classes. It is an inalienable component of the political and state structure of society emancipated from exploitation.

Today the purpose and mission of the Soviet Armed Forces are to ensure conditions for the upbuilding of communism, together with the fraternal armies to safeguard the security of the entire socialist community, to help peoples who have cast off the colonial yoke to fight against the aggressive imperialist intrigues.

The Constitution of the USSR lays down in clear-cut terms the aims of the Soviet Armed Forces. Article 31 reads in part:

"The duty of the Armed Forces of the USSR to the people

is to provide reliable defence of the Socialist Motherland and to be in constant combat readiness, guaranteeing that any aggressor is instantly repulsed."

The Armed Forces of our socialist state play an important role in the political organisation of society. They are backed by the material and spiritual might of the state and form an essential element of its military organisation. The efforts of the whole people are directed towards the Armed Forces' combat capability and high level of readiness for combat.

The Soviet Army is a part of the Soviet people, and as such shares in all aspects of their life. It is a tradition of the armed forces of socialist countries to take part in all forms of social life — political, economic and cultural. For instance, Soviet Army units take part in the construction of the "project of the century" — the Baikal-Amur Railway. They help the collective farmers and state farm workers gather the harvest, and take part in the rescue operations in the event

of natural calamities. The Armed Forces of the USSR contribute to the education of the young generation.

The personnel of the army and navy are active in political life, too. Several thousand servicemen are deputies to the Soviets of People's Deputies — bodies of state power. They work in elective Party and Young Communist League bodies.

There is nothing like this in capitalist countries, nor can there be. There the armies are frequently employed to suppress democratic actions by the working people and to carry out police (gendarme) functions in the international arena.

With every passing year the Soviet Armed Forces play an increasingly important role in the spiritual and cultural life of society. Servicemen take part in cultural work among the population and in military-patriotic education of the people.

In advanced socialist society the important social role of the army is particularly manifest in education of the young people who are called up for military service. For millions of young

men the army is a school of military and political education. The period of active service helps develop in them ideological convictions, steels them physically, and inculcates in them such qualities as courage, discipline, collectivism and internationalism.

The fidelity of the armed defenders of the Socialist Homeland to the cause of the Party and the people, and the unity of the army and the people are vital sources of the Soviet Army's might and invincibility.

What are the basic common and specific features of an army of advanced socialist society?

The Armed Forces of the USSR are built up and developed as a military organisation of strictly working class character. Led by the Communist Party, the working class plays a decisive role in matters of military development. The increasing importance of this role is a vital condition enabling the Armed Forces to accomplish their mission.

As far as its class essence is concerned, the Soviet Army is an instrument of the proletariat. At the same time it defends the interests of the whole of the working people. Therefore, by nature it is a truly people's army. No army of the capitalist world is, nor can be, characterised by such a feature.

Marshal of the Soviet Union Dmitry F. Ustinov, Minister of Defence of the USSR, emphasised this point. He writes:

"Unlike a bourgeois army which, by virtue of its class nature and purpose is divorced from the people, is opposed to the masses of workers, the armed forces of a socialist state are an inalienable part of the peoples; they share the life of the people, their cares and interests."

The role of the internationalist mission of the Soviet Armed Forces is becoming increasingly important in international relations. With the emergence of the world socialist system, the ties and contacts with the armies and peoples of the other socialist countries have been growing stronger with every passing year. Today Soviet servicemen execute their duty in the defence of revolutionary achievements, standing shoulder to shoulder with the servicemen of the Warsaw Treaty member countries. Their combat skill is being advanced in close co-operation. The inviolable friendship of the brothers-in-arms is growing stronger too.

Today, when international imperialism is trying to export counter-revolution to more and more countries and to strangle the national-liberation movements, the socialist countries have resolutely sided with the peoples attacked by the imperialists. The socialist countries render them aid in their just struggle for national liberation and social emancipation.

Another distinguishing feature of the Soviet Army is that it has always been and will be an army of peace. Armies of exploiting states have always been a threat to security. They have always been trained and built up as forces intended to carry out aggressive aims and missions of conquest. In contrast to this, the socialist state and its armed forces have always worked for defence, for prevention of aggression. As a mighty material force they serve to strengthen peace.

Still another important salient feature of a socialist army is that its development is guided by the Communist Party. This logically follows from the Party's leading role in society.

The Party works out and conducts a scientifically substantiated military policy, and it elaborates the military doctrine, concrete programme and principles governing military development.

Under advanced socialism the Soviet Army has acquired certain new features. Unshakable socio-political cohesion and ideological unity of the Armed Forces first and foremost. All Soviet servicemen from private to marshal come from friendly social classes or groups. They are welded together by common social class interests.

Another specific feature of an army of advanced socialist society is that it is an army of the whole people. This has been conditioned by the sweeping qualitative changes that have occurred in all the classes and social groups of Soviet society and by the creation of a state of the whole people. While the Armed Forces of the Soviet state are essentially a working class organisation, they express and defend the interests of the whole people — the working people. The Soviet Armed Forces also implement the will of the whole people. The political content of their functions coincides with the vital, fundamental interests of the Soviet people.

Still another feature of the Armed Forces of an advanced socialist society is the further enhancement of their ideological level, of the level of their political maturity and disciplinary standards.

The Armed Forces of the USSR are a potent factor contributing to world peace and security of peoples. This is their historic mission. Today the Soviet Armed Forces together with the armies of the

fraternal socialist countries reliably defend the territorial integrity of the states belonging to the socialist community. Their combat achievements and peaceful labour of their peoples, and capability curbs the aggressive ambitions of the reactionary circles of imperialism. They are a reliable safeguard of peace.

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ARMED FORCES

ORDNANCE MAKERS' CONTRIBUTION TO VICTORY DURING WORLD WAR II

Moscow SOVIET MILITARY REVIEW in English No 11, Nov 83 pp 19-21

[Text]

In spring 1945 PRAVDA published a report of the collective of an ordnance works to the Chairman of the State Defence Committee of the USSR on the manufacture of their 100,000th artillery piece. This was certainly an outstanding achievement. It is a known fact that the munitions industries of Nazi Germany and of Nazi-occupied countries in Europe were able to turn out 102,000 artillery pieces during the war.

Below we publish the interview M. Olevsky, former chief engineer of the works, State Prize winner, kindly granted to our correspondent P. Studenikin.

Please clarify a point. Your ordnance works manufactured 100,000 artillery pieces since it was commissioned, but not only during the war period. Am I right?

Yes, of course. But in the early 1930s people used to hunt wild ducks at the present site of the works. A few years later it produced its first output, not guns, but billets and open-hearth steel ingots. It was only shortly before the war broke out that the works introduced the manufacture of artillery pieces. One year before the war ended we began to switch over to peaceful production — oil equipment.

Describe the ordnance developed and manufactured by our industries.

When Nazi Germany attacked the USSR the Soviet Army already had highly efficient artillery systems. For instance, the USV 76 mm gun in its latest ZIS-3 version is regarded as one of the best artillery pieces of the Second World War.

In 1939 and 1940 our ordnance industries put into serial production guns, howitzers, and mortars with excellent characteristics. The Soviet Army had a powerful antitank weapon — the well-known 45 mm gun, and effective antipersonnel weapons — the 82 mm and 120 mm mortars.

In addition to the conventional artillery a fundamentally new weapon — rocket mortars — was developed.

What measures were taken to improve the production performance of ordnance works?

I remember very well being summoned to the People's Commissariat of Armament together with Vasily Gavrilovich Grabin, chief designer of the works, late in the night, or rather early in the morning of June 22, 1941. It was decided to put into production the ZIS-2 gun, a powerful antitank weapon. Shortly after that the State Defence Committee ordered the manufacture of 45 mm and

76 mm guns to be resumed. In the first month the plan for the output of 85 mm antiaircraft guns was increased by 50 per cent and of 37 mm antiaircraft automatic guns, by 500 per cent. Thanks to the measures taken then the country boosted the output of artillery pieces in the first three months of the war by 130 per cent.

However, on the day the war broke out, i.e., on June 22, 1941, we were in for a shock. When we returned to the works, we learnt that several thousand workers, technicians and engineers had been summoned to report to the local military commissariats (recruitment centres). They were being drafted into the army. In addition, the district military commissariat commandeered 180 trucks from our fleet of 280. What could we do? The manager phoned to the secretary of the Regional

CPSU Committee and then to Kliment Yefremovich Voroshilov*. The workers were returned to the works from the drafting centre. Overtime was legally introduced, all paid annual leave was cancelled... These measures, accompanied, naturally, by the steady growth of labour productivity helped sharply to increase the output of artillery pieces from the outset. In July the works was turning out 30-35 guns a day instead of three.

This was a major achievement. But the situation did not improve. We could not afford any respite. We learnt about the evacuation of the Arsenal Munitions Works from Kiev, a giant of ordnance manufacture, of the Kirov Works from Bryansk, the Novochoerkassk Works which, on the eve of the war, had just launched the production of corps artillery pieces, the big Kalinin and the Voroshilov Munitions Works. Though we had stepped up our own plans, we had to add the plans of these munitions works to ours.

But as early as October 1941 Amo Sergeyevich Elyan, manager of our works, submitted to the People's Commissariat of Armament a schedule for the manufacture of 100 guns per day.

Does this mean that in the early period of the war the output of ordnance at your works increased approximately 20 fold? How did you manage to do that?

Now that so many years have passed since then I sometimes cannot believe that this was possible. It is hard to give you a simple answer. We owed our success to enthusiasm, science and efficient production engineering. In those days practically every worker, technician and engineer was improving something and offering innovations...

The designers developed a broaching machine which made it possible

to reduce the labour input into a certain operation 30 times. The works as a whole modernised 200 and developed 98 completely new machines and machine tools.

Once we launched a "month for revealing untapped production reserves." During that month 3,752 innovations were submitted, which made it possible to equip an additional 60 artillery regiments.

After the nazis were routed at Stalingrad Chief Marshal of Artillery Nikolai Nikolayevich Voronov sent a telegramme to our works:

"Your output in the skilful hands of Soviet artillerymen are inflicting every hour heavy losses on the nazi forces on all the battlefronts of the Great Patriotic War..."

We managed to follow the combat record of one of the guns we made. It covered a route from Stalingrad to Ternopol. The artillery crew of that gun destroyed 10 tanks, five armoured personnel carriers, five self-propelled guns, 15 motor vehicles, 20 enemy artillery pieces, seven mortars, 26 earth-and-timber weapon emplacements and about five nazi infantry battalions. Over 11,000 rounds were fired from it, which was nearly double its normal service life.

This gave us a justified sense of pride. It inspired us to work even more efficiently towards victory over the hated enemy.

I must say the collectives of all munitions works worked with equal enthusiasm. During the war Soviet industry turned out 825.2 thousand guns and mortars, i.e., several times more than the industries of nazi Germany and its satellites.

Bourgeois falsifiers of history of the Second World War, while admitting the achievements of the Soviet munitions industries, claimed that they were due to the fact that the ordnance models remained practically unchanged from the beginning to the end of the war. Please comment.

Soviet design thought was rather far ahead of German design thought. Therefore, we had no need to launch

the production of fundamentally new models of artillery systems to meet an emergency, so to say.

However, it would be wrong to contend that we did not develop any new weapons. During the war considerable improvements were made in Soviet ordnance. Suffice it to say that we put into mass production approximately three quarters of newly developed models of artillery systems with which the Red Army was equipped at the end of the war. These new models were developed and put into manufacture during the war.

For instance, in 1943 a new 152 mm howitzer and a highly effective 160 mm mortar were developed. We started to make 85 mm and 122 mm guns for the tanks. We also put into serial production the 57 mm and then the 100 mm antitank guns.

The design collective under Fyodor Fyodorovich Petrov developed big artillery pieces, howitzers, tank and self-propelled guns. The design bureau under Boris Ivanovich Shavyrin worked on big mortars. There was another design bureau. One of its leading designers was Ilya Ivanovich Ivanov. It should be mentioned that this collective developed quite a few heavy and super-heavy artillery pieces and several naval ordnance pieces too. Many of the designers were honoured with the title of Hero of Socialist Labour.

In the beginning you said that your works began to switch over to peacetime production as early as 1944. Does this mean that the war was for all intents and purposes over?

I would not say so. In 1944 the output of our industries considerably exceeded the demand of the battlefronts. It was possible, therefore, to switch over some of the plants to peaceful production. As to the war, it ended for us in 1945, just like for everybody else.

On the night of May 8, 1945 Dmitry Fyodorovich Ustinov* phoned our

* Voroshilov Kliment Yefremovich, Soviet statesman, Party and military leader, Marshal of the Soviet Union. He was a member of the State Defence Committee during the Great Patriotic War (1941-45).

* Ustinov Dmitry Fyodorovich, Soviet Party and military leader and statesman. Marshal of the Soviet Union, now Minister of Defence of the USSR.

works. The Minister of Armament socialist emulation movement 34 times. It was given to the collective for all time. The banner carried the Order of Lenin, the Order of the Patriotic War 1st Class. Before that we had Red Banner and the Order of the won the Challenge Red Banner of the RCP (B) Central Committee in the attached to it the Order of the Patriotic War 1st Class. Over 300 workers and production managers were also awarded Orders. Amo Sergeyevich Elyan, manager of the works, was honoured with the Order of Suvorov 1st Class which is normally conferred upon strategists who have won major battles.

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ARMED FORCES

HISTORICAL OUTLINE FOR ROCKET TROOPS AND ARTILLERY DAY

Moscow SOVIET MILITARY REVIEW in English No 11, Nov 83 p 46

[Article: "Rocket Forces and Artillery Day"]

[Text]

Early in the morning on November 19, 1942 the salvos of 15,000 artillery pieces, mortars and rocket mortars heralded the beginning of the grandiose counteroffensive of the Soviet forces at Stalingrad. A hurricane of artillery fire smashing the enemy fortifications, his fire weapons and manpower cleared the way for the Soviet Army to victory over a nazi grouping comprising a force of 330,000 men.

This day of the battle on the Volga was a turning point in the Great Patriotic War (1941-45) and was as a brilliant page in the glorious chronicle of the Soviet Armed Forces. This day has become a national holiday — Rocket Forces and Artillery Day.*

The Soviet artillery covered a long and glorious path. The great Lenin and the Communist Party stood at its cradle as well as of all military establishments of the first proletarian state in the world. During the years of the Civil War and foreign intervention, the Red Army artillerymen courageously fought at all fronts and stood the test of severe trials

with honour. In battles of those years the Soviet artillery increased its firepower, accumulated combat experience and made a considerable contribution to the victory of the young Soviet Republic.

As a result of the achievements in the field of science and technology and the development of heavy industry during the first five-year-plan periods the defensive capacity of the Motherland grew and became stronger while technical equipment of its army and navy improved. New types of guns and howitzers, mortars, antitank and AD guns were designed. Great attention was paid to the rocket artillery. By the late 30s rocket shells were introduced into military service. Literally on the eve of the Great Patriotic War, the M-13 rocket launchers appeared in the forces. The first battery of rocket mortars under Captain I. A. Flyorov was tested on July 14, 1941 in battles near Orsha. Its fire attack, sweeping away everything in sight like a tornado, inflicted enormous losses on the enemy.

From the first to the last day of the Great Patriotic War the Soviet artillery as the main firepower of the Land Forces broke through the enemy defences. By a barrage of fire it opened the way for our advancing infantry and tanks while on the defence its fire was a shield against which the enemy attacks had broken. During the war the Soviet artillerymen destroyed over 70,000 enemy tanks and a large amount of other materiel and enemy manpower. The AD fighting men shot down over 21,000 enemy planes. For high

combat skill, courage and heroism displayed in battles against nazi invaders, over 1,600,000 artillerymen were decorated with Orders and medals, while 1,800 of them were honoured with the title of Hero of the Soviet Union. Nearly 550 artillery brigades and regiments were named Guards.

During the war our artillery grew quantitatively and qualitatively. The production of rocket, AD, antitank and self-propelled artillery and mortars expanded particularly rapidly.

In the postwar years the technical equipment of the Soviet Armed Forces underwent great qualitative changes. Thanks to the achievements of Soviet science and technology and the indefatigable concern of the Communist Party for strengthening the defensive capability of the country, the Strategic Rocket Forces had been created. Equipped with formidable nuclear-missile weapons, they are a powerful fire shield of the USSR and serve as an important means of deterring imperialist aggression.

The rocket forces are now the basis of the firepower of the Land Forces. Armed with operation-tactical and tactical missiles, they are capable of destroying with great accuracy and reliability various targets at distances from several dozen to many hundred kilometres. The combat use of missiles does not depend on weather conditions, season or time of the day.

Nowadays, the artillery of all types and predestinations has organically merged with the rocket forces. It is capable of carrying out a

* The celebration of Artillery Day was timed to November 19 — the beginning of the rout of the German troops at Stalingrad and was established by a Decree of the Presidium of the USSR Supreme Soviet on October 21, 1944. By a Decree of the Presidium of the USSR Supreme Soviet in connection with the arrival of nuclear-missile weapons and the formation of a new fighting service of the Soviet Armed Forces — the Strategic Rocket Forces, the Presidium supplemented it and the holiday was named Rocket Forces and Artillery Day.

broad and tactical manoeuvre and of reliably securing with fire the combined arms units and formations in all types of battle at any theatre of operations. The modern, fully motorised gun, howitzer, rocket and antitank artillery and mortars are notable for their high mobility, manoeuvrability, rate of fire and more powerful shells and projectiles.

The Soviet rocket and artillery materiel which embody the latest achievements of scientific-technical progress are in skilful hands, in the

hands of people politically mature, ideologically convinced, devoted to the Leninist Party and Socialist Motherland and well trained in a military and technical respect. Brought up on traditions of heroism, valour and labour deeds of their grandfathers and fathers, the Soviet missilemen and artillerymen day in day out enrich their knowledge, master combat equipment, perfect their combat skill. They know only too well that their excellent training standard is the main condition of

combat readiness of the forces, their readiness to retaliate in kind at any minute any aggressor.

And it is in their honour, in honour of masters of rocket and artillery fire of all generations, in honour of those who did not return from the fields of battle fighting for the freedom and independence of the Soviet Union, and in honour of designers of splendid Soviet rocket and artillery equipment that the salvos of fireworks will thunder on November 19.

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GROUND FORCES

NEED FOR INITIATIVE, DECISIVENESS AND INDEPENDENCE IN OFFICERS STRESSED

Moscow KRSNAYA ZVEZDA in Russian 22 Nov 83 p 1

[V. Grechaninov, lieutenant colonel, commander of Guards Motorized Rifle Regiment, Southern Group of Forces]

[Text] Soon after the final concluding sessions we had a regimental Party election meeting. Naturally, in analyzing the achievements communists talk about deficiencies, omissions and untapped reserves. In particular they discuss the necessity of increasing efforts in indoctrinating in our officers such qualities as independence, creativity and initiative.

In general, during the concluding sessions, as in everyday life, there were several events in which high command qualities were displayed. Indeed, regimental life is dynamic and filled with situations demanding from officers the ability to independently resolve complicated tasks. And more so when exercises are the topic in question.

Here is an example. The battalion commanded by Guards Lieutenant Colonel G. Chervov was attacking in the first echelon. Interacting with the adjacent, attached and supporting elements the battalion attacked the "enemy" exactly at the designated time. Success was assumed in the direction of the attack. However, the situation radically changed quickly. The battalion had to begin battling with a tactical airborne assault landing force. I won't go into details of this battle. I will note however that Guards Lieutenant Colonel Chervov showed initiative and independence in complicated conditions. And this in many ways facilitated the battalion's successful fulfillment of the assigned mission. True, some said that Chervov at times took unnecessary risk. Well, there were elements of risk in his actions. For example, while pursuing the "enemy" into mountainous and woody terrain the battalion commander risked taking combat vehicles places where in the opinion of several experts they could not go. But this risk was realized and based on outstanding knowledge of tactics, training and the moral-combat quality of his personnel. And he justified his actions. The enterprising actions of the battalion commander were a lesson for all the exercises' participants.

Initiative, decisiveness and independence. It is difficult to imagine an officer without these qualities. They are even more necessary because at his

disposal as a rule are heterogeneous forces and equipment which he must command in the complicated, fast changing situation of modern battle. The great psychological and physical loads and rigid time limitations all increase the role of command independence and the officer's willingness to accept responsibility for meeting suddenly arising mission and they demand the ability to think without turning to a senior commander. Minister of Defense for the USSR Marshal of the Soviet Union D.F. Ustinov, speaking at the All-Army Congress of the Main Party Organization Secretaries named these qualities among others which are now most necessary to military commanders. As is known, these qualities are not handed out to officers together with their diplomas on completing military school. And it is very important that his further service actively help the development and perfection of these qualities. Certainly, help and support from senior comrades and commanders is necessary here. And it works well when this is done at the proper time.

At the final session, for example, I watched the activities of company commander Guards Senior Lieutenant Chaus with special interest. I noted with satisfaction how the young man grew in a professional sense. His company acted as a flanking detachment and his assignment was rather complicated. After outwitting the "enemy" he had to go out to a pass and hold it until the main force approached. Guards Lieutenant Chaus did everything in an outstanding manner and showed creativity, initiative and independence.

This fact is especially pleasing because the command formation of the young officer went poorly. On one hand it is commendable that he always tried, as they say, to write in his own hand and not act according to pattern. But on the other hand he made more errors than many of his contemporaries. It required a lot of patience and tact to help the young officer form his style and not suppress his initiative. And now Guards Senior Lieutenant Chaus is among competition leaders.

Similar examples once again show how one must thoughtfully and patiently help young officers in their formation while not allowing petty tutelage to occur. And crudeness and lack of tact are certainly not allowable here. One must talk about this, as unfortunately it still exists here and there among us. I once had the opportunity to see this: during an attack the battalion combat line was not entirely straight due to a maneuver made by one of the company commanders, Guards Senior Lieutenant V. Sbrodovskiy. This was enough for the battalion commander to give the subordinate a real dressing down. What reproaches the young officer heard hurled his way! And over the radio.

I then had to give the battalion commander a serious reprimand. How could I do otherwise? Even if the company commander's decision in the maneuver was not indisputable, it did not warrant the battalion commander's action. Such actions could in general eliminate the desire in a man to display initiative. Indeed would it have been better if Guards Senior Lieutenant Sbrodovskiy in general had not responded to the change in the tactical situation and had been passive?

Another case comes to mind. During tactical flying conducted by Guards Major S. Khnykov, Guards Senior Lieutenant V. Gerasimov decided on the actions of the lead march element. During the course of the young officer's explanation of the plan, the commander gave a hypothetical situation. Gerasimov quickly reacted to the change in situation. But the moment Guards Major Khnykov expressed doubt as to the advisability of the plan adopted by the young officer, the officer immediately renounced his own plan. What does this thoughtlessness indicate? First of all it is evident that individual officers in this unit are not accustomed to thinking independently and are used to turning to the senior commander. Besides as later became evident Guards Senior Lieutenant Gerasimov's plan was essentially rational. But he was unable to defend his point of view.

The ability to defend one's idea. To me, this is also one of the aspects of command. Of course, if this ability has nothing in common with idle self-sufficiency and self-confidence. It goes without saying that success in indoctrinating such qualities as independence and initiative in officers depends on the atmosphere prevalent in the small and large units. Indeed it is difficult to expect initiative from officers when they live and train in an atmosphere of distrust and overcautiousness.

I do not want to name the participants in this episode I will tell (they learned a lesson from it). At one of the exercises the artillery battery attached to the company fulfilled its attack preparation missions. As soon as the battery commander, a young officer, tried to act independently, either the artillery battalion commander, the artillery regimental commander or an officer from a major staff interfered. Even the Senior Lieutenant was taken aback by the prompting. Thus he in point of fact was unable to display his own professional skills. And then the officer got so used to the fact that others resolved his missions that he could not make any kind of responsible decision without turning to a senior commander. The affair was finally corrected, but it took a lot of work.

An indispensable condition for formulating command independence is the strict rhythm of the training process, firm procedure by regulation and strong military discipline in the regiment. We have already accomplished much in this plan. But not all small unit commanders here, as noted at the Party Congress election meeting, are persistent and some of them still lack professional skill. Raising this is one of the central missions we are assigning ourselves in the new training year.

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GROUND FORCES

NIGHT COMBAT OFFENSIVE, DEFENSIVE OPERATIONS DESCRIBED

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 20-21

[Article by Major V. Osipenko: "Night Combat Operations"]

[Text]

NIGHT — AN ALLY OF THE SKILLED

After a march a Mts Inf Bn reinforced with a Tk Coy, Arty Bn and an Eng Pl arrived at the assigned area. Soon an order was received from the regimental staff instructing the battalion to pass over to the offensive during the night, capture a company strong point of the "enemy" and then exploit the success achieved.

Taking stock of the situation, the Bn CO considered most thoroughly the peculiarities of the forthcoming combat operations.

After a detailed analysis of the recce data, specifics of the defence formation, possibilities of the friendly and the "enemy" subunits, a decision was taken to secretly advance under the cover of night from the departure area and to capture the strong point by a surprise attack. Subsequently the battalion was to advance in the indicated direction.

Organising the battle, the Bn CO, his staff, other officers thought over in detail the question of illumination support. It included illumination of the objectives of the attack, targets to be neutralised by the artillery on the forward edge and in the depth of the strong point, organisation of illuminated reference points for the designation of the direction of the offensive, giving signals of mutual identification, target designation and maintenance of cooperation, designation of the subunits' position and marking the lines held by the forces.

Much attention was also paid to battle formation, the basis of which was the commander's plans. It boiled down to delivering a heavy and surprise primary blow at the "enemy" and to carrying out the assigned mission in a brief time without any redispositions and commitment of reserves to action at night. The achievement of this goal was best secured by the one-echelon formation with holding out a reserve. The commander located the attached fire weapons in the immediate proximity behind combat formations of the motorised companies.

Well-considered organisation of battle, grounded decision-making combined with accurate control over subunits

during the attack, skilful use of the night vision devices and illumination means resulted in success. The Bn CO's tactical skill and that of his staff and other officers were supported by the high field training standard of the servicemen, their ability to fulfil complicated missions in conditions of limited visibility.

SPECIFICS OF A NIGHT OFFENSIVE

Combat experience testifies that night battle today demands from the personnel a particularly high training standard. This is due to the fact that in conditions of limited visibility additional difficulties arise for subunits' actions. The main ones are: complicated orientation on the terrain, keeping to the prescribed direction when advancing or counterattacking, and surmounting obstacles and obstructions. Besides, the fatiguability of the personnel increases, detection of targets, their destruction and leading of columns become more difficult and surprises are possible more often both because of mistakes in defining one's position and also as a result of the enemy's concealed manoeuvring. All these exert a substantial influence on the control over subunits, and on maintaining cooperation between them.

The night offensive may begin with the breakthrough of the enemy defences or may be a continuation of combat actions fought in the daytime. In defining the direction of the concentration of the main efforts preference is given to the one which excludes a complicated manoeuvre and leads to the planned objective by the shortest route.

A combat mission is determined proceeding from the possibility of its fulfilment by the attackers during the night. When plotting the line which is to be taken by the morning, the length of the dark time, readiness of subunits for conducting night operations and also their provision with illumination means and night vision devices are taken into consideration.

As a rule, such manpower and equipment which can carry out the assigned mission for the night without committing the second echelons (reserves) to battle are detailed in the first echelon. Usually the offensive of the motorised infantry subunits is carried out on foot in close cooperation with the attached tanks.

In his decision for an offensive the commander, besides ordinary questions, defines, and, when assigning missions and organising cooperation, indicates: the lines which subunits are to capture by the morning, which of them are to be consolidated before dawn, the order of repulsing possible enemy counterattacks, illumination support and passing from night to day actions and also measures for camouflaging the troops from enemy night vision devices.

During on-the-spot reconnaissance carried out during the daytime, besides ordinary questions, those of organising illumination support are worked up. They include: creation of illuminated reference points (alignments) for designating the direction of the subunits' offensive, illumination of targets, lines and areas, who illuminates them and when; light signals for target designation and mutual identification; light

signals on the routes, deployment lines for designation of passages in mine fields, etc.

A night attack more often than not is carried out after a short fire preparation or a powerful artillery attack. To achieve the surprise element it is advantageous sometimes to attack without fire preparation and illumination of the FEBA. In all cases the attack is supported by artillery and aircraft.

Numerous examples of the Great Patriotic War (1941-45) and local wars show that in night battle the approach to the flanks and rear of the "enemy" proves that even small forces can play a decisive role in his quick defeat. However, this manoeuvre must be simple and, as far as possible, concealed from the enemy observation (along a depression, ravine, cutting, along the border of a forest, etc).

THE ORDER OF CARRYING OUT DEFENCE

If the defensive was taken up before nightfall, the forces studied the terrain, organised cooperation, the fire system, particularly antitank fire, set up positions with engineer works and also thoroughly prepared illumination before the FEBA and on the lines of the probable enemy deployment, then conditions are created for the successful fulfilment of missions during night fighting. In this case fire weapons, particularly antitank ones, are positioned for the protection of roads along which the offensive of the enemy main forces is most probable.

The defensive must be active. Skillful use of various tactical methods and techniques makes it possible to bring to naught the attackers' advantages. For example, before the enemy advance in night conditions it is possible to withdraw subunits from the FEBA unnoticed. As a result, the blows of the artillery and aviation will be delivered at blank space. Besides, the defenders can under the cover of the night secretly regroup manpower and equipment, and suddenly open flank fire from ambushes. Counterattacks which are sometimes carried out by small forces are highly effective at night.

One of the most important missions of subunits having taken up defensive positions is to detect the assumption of the offensive by the enemy. To maintain readiness for repulsing an attack, duty fire weapons are detailed in addition to strengthening the reconnaissance, while part of the antitank weapons is advanced to fire positions closer to the FEBA. Particular attention is paid to the screening of battle formations from radio means and night vision devices of the enemy.

In case the attackers advance, the subunits in defence are alerted. Detailed guns and mortars illuminate the terrain with special ammunition.

The enemy attack is repelled by the established signal by surprise fire of all fire weapons. After the battle the subunits in defence are reorganised (they send the wounded to the rear, replenish ammunition, restore the system of fire, and engineer constructions) and prepare to beat off repeated attacks.

In fighting enemy landing parties, surprise actions acquire a decisive importance. This is achieved by concealed advance of manpower and equipment and by delivery of rapid blows from different directions. The terrain in the area of landing must be intensively illuminated.

It is obvious that a modern night battle, be it offensive or defensive, demands an extremely high training standard of the commanders and personnel. As experience has shown, combat actions are carried out continuously. Therefore neither night nor other conditions of limited visibility can become a reason for decreased activity.

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GROUND FORCES

CHARACTERISTICS OF 100MM ANTITANK GUN MT-12 GIVEN

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 26-28

[Article by Colonel Engineer V. Knyazkov]

[Text]

This gun is designed to destroy tanks, self-propelled guns, APCs and other armoured vehicles of the enemy. It can be used against armoured turrets and embrasures of pillboxes and other reinforced emplacements and to destroy enemy manpower and fire weapons located in the open or behind light shelters.

The gun is most effective when used for direct-laying fire. The gunner sees the target right in front of himself and aims the sight cross-hairs directly on its most vulnerable spot. The shell flies along a flat trajectory and therefore its point-blank range (the range throughout which the shell trajectory does not exceed the target height) becomes especially significant. For the 100-mm antitank gun this range reaches 1,880 m at a target height of up to 2 m.

In general, the gun design follows a classical pattern: its barrel with a breechblock is mounted on a carriage. The gun barrel is a smooth-bore tube monoblock provided with a muzzle brake, breech ring and cartridge holder.

The gun carriage comprises a cradle, a recoil system, a top carriage, gun-laying mechanisms, a counterbalance, a spring-mounted bottom carriage, trails, wheels, a shield and sighting equipment.

The cradle is a cast cylindrical casing used to direct the barrel during recoil and counterrecoil.

The recoil system, which performs diversified functions, consists of a recoil brake and a counterrecoil mechanism.

A shot has been fired but the gun carriage has not even stirred. The barrel at first quickly recoiled and then just as quickly returned to the initial position. The eye has hardly managed to "catch" its backward-forward motion. This was the result of relatively small-sized recoil devices — the recoil brake and the counterrecoil mechanism. They could have been made compact with an efficient muzzle brake screwed on the barrel. It operates as follows: as soon as the projectile passes the muzzle end, a part of gases which follow it change their

direction and speed. Outflowing from inclined holes, these gases produce a force which acts opposite to the backblow.

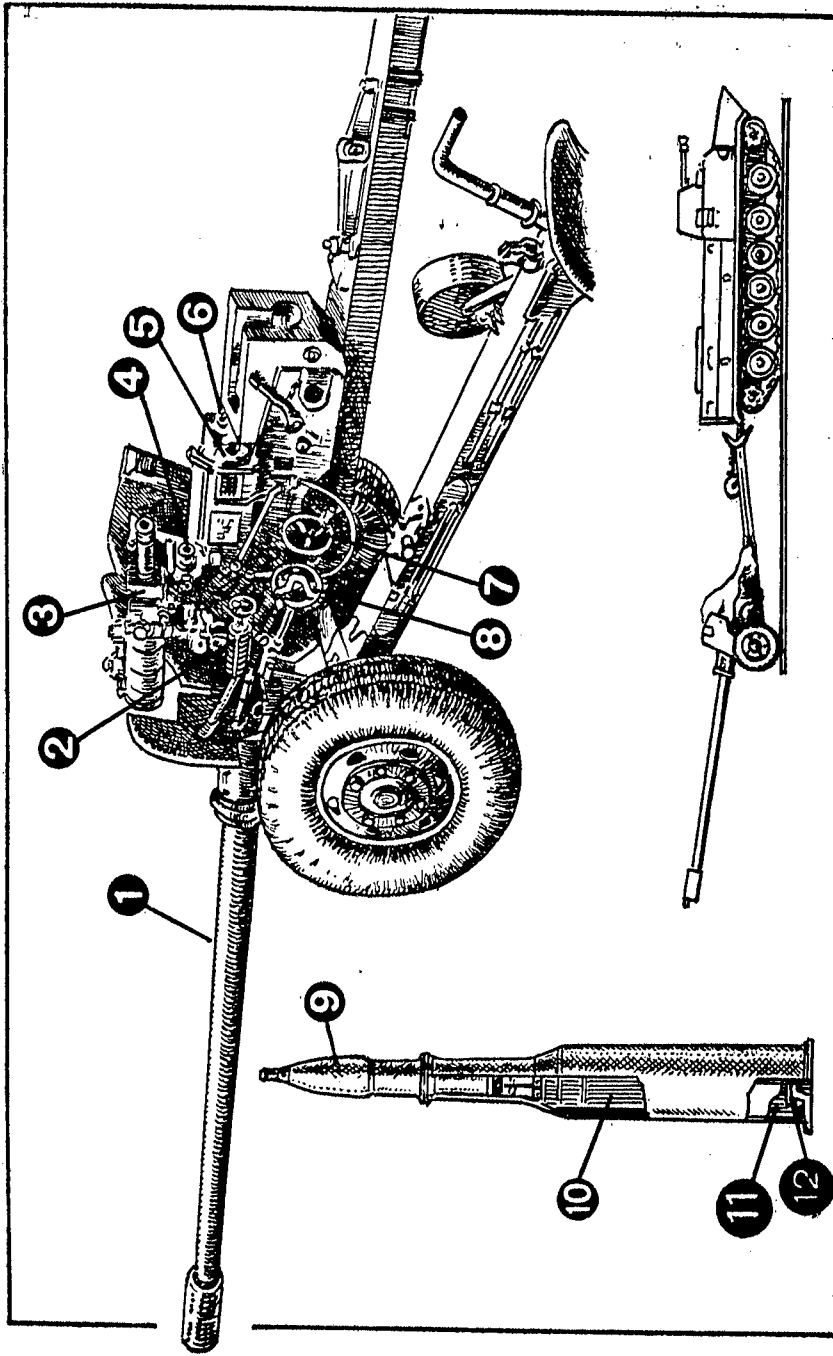
The top carriage serves as a basis for the gun tipping part which accommodates the laying gears (elevating and traversing mechanisms), a counterbalance and a shield.

The purpose of other mechanisms and assemblies obviously follows from their names: the spring-mounted bottom carriage, wheels, sighting equipment, etc.

The gun can fire different artillery shells: hard-core, hollow-charge and high-explosive.

To ensure a high rate of fire the gun uses fixed rounds in which a projectile and a propelling charge are united into a single whole by means of a cartridge case. To load the gun with such rounds requires less time as compared to separate-loading ammunition.

The maximum and practical rates of fire are 14 and 6



100-mm antitank gun: 1 — barrel; 2 — mechanical sight; 3 — gun night sight; 4 — telescopic sight; 5 — recoil brake; 6 — counterrecoil mechanism; 7 — traversing mechanism; 8 — elevating mechanism. High-explosive shell: 9 — shell; 10 — top part of a shell; 11 — bottom part of a shell; 12 — igniter.

rounds per minute respectively.

Let us examine the construction of ammunition, in particular the design of a high-explosive shell. It has been mentioned above that the gun barrel is a smooth-bore tube, i. e., there are no traditional grooves inside the barrel which are characteristic of classical cannon. The grooves imparted rotation to the projectile to prevent its "tumbling" along the trajectory, which ultimately resulted in an increase in the fire range and accuracy of hits.

But how has this problem been solved in the 100-mm gun which has no grooves? It would be appropriate to remember here such an artillery weapon as a mortar. Its barrel is also a smoothbore tube but its mine is stable in flight due to attached stabilisers. The projectile of the 100-mm antitank gun is also provided with a stabiliser.

The high-explosive projectile consists of a steel cylinder, a stabiliser, a point-detonating fuse and a tracer. On its body there are a copper obturating ring and three bur-relets. The obturating ring fixes the projectile in position within the case neck. The annular groove under the ring serves to ensure reliable projectile-to-case connection during compression of the case neck.

While the projectile, after being fired, is moving in the barrel bore, its stabilising vanes remain folded up. As soon as the projectile leaves the muzzle the vanes unfold, ensuring stabilisation in flight.

The high-explosive shell can destroy targets at a distance of up to 8,200 m. The round with the projectile weighs 29 kg, the weight of projectile proper is almost 17 kg.

The shell fuse can be set to any of the three positions: fragmentation, high-explosive and delayed high-explosive. The shell can burst either on the surface of the barrier or inside it and destroy both open and covered targets. The shell is provided with a tracer which serves to monitor the shell trajectory. During burning it produces a burning trace clearly visible at any time of the day.

Artillerymen often use such a term as a manoeuvre with fire or, as it is sometimes called, a manoeuvre with trajectories, which means the gun's ability to quickly change the direction of fire within wide limits, without moving or turning the weapon. In practice it means the ability to shift fire from one target to another. The effective field of fire becomes especially important in that case. With its traversing range of 53-54°, maximum elevation of 19-21° and a depression angle of 6-7°, the gun precisely suits the purpose.

The gun designers did their best to facilitate the crew's actions and gun operation on difficult terrain. An excellent torsion suspension system and great clearance (380 mm) enable trucks to easily tow it across country. Instead of a bulky pack of shock absorbers, the gun uses steel bars with grooves located in the

bottom carriage. The steel bars work by twisting. When the gun wheels roll over ground irregularities, all the shocks are transmitted to torsion bars which under their impact twist and untwist, and thus damp them. This makes it possible to considerably increase the gun towing speed.

It takes the crew 60 sec to change over the gun from firing to travelling position. This done, the gun is hooked up and hauled away. On a good road the truck can tow the gun at a speed of up to 70 km/h.

The gun is provided with a skiing outfit to ensure its transportation through deep snow and swampy terrain. The outfit is a metal welded structure provided with wide runners. The crew rolls the gun wheels onto the runners. As each wheel is fastened to its own runner by a separate coupling chain, the gun can fire directly from the skis. But the crew should remember that in that case the traversing range will be somewhat less.

Terrain conditions permitting, the crew can tow the gun, if need be, to the battlefield manually with the help of a small metal roller which is placed under the carriage trail and is usually fastened with a lock to the left trail.

Soviet designers have done everything possible to make the gun crew members feel confident in most critical combat situations. The MT-12 100-mm antitank gun is a powerful artillery weapon capable of reliably destroying various armoured targets in modern combat conditions.

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GROUND FORCES

STEPS GIVEN FOR PREPARING MT-12 GUN FOR FIRING

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 28-30

[Article by Lieutenant-Colonel Engineer A. Semyonov]

[Text]

The fighting efficiency of the MT-12 antitank gun depends to a great extent on proper handling and careful preparation of the gun for firing. The gun should be always ready for combat use, but before each firing it is necessary to make sure that all its mechanisms, above all the recoil and sighting devices, are in good repair. This check-up is performed by the gun crew. Any failures spotted are rectified with the participation of an armourer.

When starting to examine the gun, make sure that all its mechanisms operate properly and that all bolts, nuts, check screws and lockpins are tightened securely. Then remove the covers, change over the gun to fire position and check that the gun is not loaded. Clean the gun of dust, dirt and excessive lubricant. Brush up the bore with a clean dry cloth. Then partially disassemble the breechblock, wipe all its parts dry with cleaning cloth and cover them with a thin layer of lubricant. Assemble the breechblock again and check it for serviceability.

Then open the breechblock, examine the barrel and ensure that it has no dents, bulges or cracks. If some defects are detected which the crew cannot rectify on their own, the gun leader should inform the platoon commander or the battery senior officer and then

follow his instructions. After that examine the breechblock and semi-automatic system and check the recocking mechanism for proper functioning. Open and close the breechblock several times. If it requires considerable effort or if the breechblock wedge closes with difficulty, adjust the closing spring with an adjusting nut.

During examination pay special attention to the reliability of fastening of the recoil-piston rod and the counterrecoil rod to the cradle and of recoil system cylinders within the barrel casing. Also inspect the recoil distance indicator for serviceability.

The sighting mechanisms are checked over the whole range of horizontal and vertical angles. They should move smoothly, without jerks or jamming. Pressure in the counterbalance cylinder should

provide an approximately equal effort on the elevating handwheel handle both at elevation and depression angles. If this effort changes only slightly when the tipping part becomes steady, it means that the counterbalance functions normally and requires no adjustment. If this effort sharply increases or decreases, check the pressure in the counterbalance cylinder and adjust it accordingly.

The pressure in the counterbalance can also change due to fluctuations of the ambient air temperature, which is especially characteristic of desert and mountainous areas. If the effort on the elevating mechanism handwheel does not correspond to the rated value, increase (decrease) pressure in the counterbalance by screwing in (out) the compensator piston.

After that inspect the undercarriage and shield. Examine the condition of rubber

tyres, check that they are reliably secured on wheel rims by lock rings, that the rims are not bent and that the nuts and studs that secure the wheels to the bosses are not loose. To check whether the trails are reliably secured in the travelling and action position, first bring them together and fasten with a trail-clamping transom; then unfasten them and bring apart.

The check of recoil and counterrecoil mechanisms consists in determining the amount of liquid in the recoil brake and counterrecoil mechanism and the pressure in the latter. Excess liquid is inadmissible, as it may cause the outer cylinder to bulge or the counterrecoil rod to break. If there is a lack of liquid or compressed air (nitrogen), add them with an air-hydraulic pump. Always make sure that there is no leakage from recoil and counterrecoil mechanisms. If there is, stop it in accordance with service regulations.

The sighting equipment, though carefully adjusted at the manufacturing plant, may misalign during operation, especially when the artillery subunit conducts a march on adverse terrain. This misalignment is caused by wearing of moving members. Therefore, the sighting equipment must be checked before each firing. The check consists in matching the setting of the scales of the mechanical, optical, night vision and panoramic sights with the position of the barrel bore axis. The record has shown that at first it is necessary to check the optical and then mechanical and night vision sights. Individual corrections are usually derived during Maintenance No. 1 or after the repair of sighting devices. However, after a prolonged march on

heavy terrain it is advisable, time and situation permitting, to determine again before firing the correction for sighting line deviation to ensure that sight readings correspond to the actual elevation of the barrel. This will rule out possible errors in laying the gun at the target.

As we have already mentioned, the first to be checked is the optical sight. Check whether it is reliably fastened in the clamp and whether the clamp catch tooth is in the sight key groove. Examine also all wing knobs for proper tightening. Never use a wrench or pliers to screw in wing knobs as this can damage them.

Then check the operation of prediction and gun laying mechanisms. To this end, set the direction and range correction scales at zero and move them smoothly, without jerks and jamming, over the entire range of angles. The handwheels during this operation should be reliably secured in the prescribed position by means of ratchets. After that check the bore sighting line by a distant aiming point method or with the use of a testing target.

If the first method is used, select an aiming point at a distance of at least 1,000 m from the gun. The point should have distinct outlines (it is best to use for the purpose a post, a separate tree, a factory chimney, a corner of a building, etc.). Before beginning this check, attach cross strings to the barrel muzzle end with the help, for example, of matches inserted into the holes at the ends of marks available on the barrel muzzle end. Then remove the percussion mechanism and lay the gun barrel at the aiming point, sighting

through an aperture in the wedge designed for the exit of the striker pin (or through the gun breech bore sight) and the centre of the cross strings on the muzzle end. During this operation the gun is moved by means of its elevating and traversing mechanisms. If the sight is adjusted correctly, the top of the bar (in the form of a great triangle) will coincide with the aiming point. If the bar top is displaced with respect to the aiming point, additional adjustment is needed. Experience shows that the turning of a light filter or protective lens, should one be mounted on the sight tube, may cause the bore sighting line to shift. If the shift is insignificant, less than one minute, adjustment is unnecessary.

Adjustment of the optical sight by the testing target method is similar to that by the distant point method. The only difference is that in that case the gun barrel and the bar top are made coincident with cross strips on the testing target. The latter is placed at a distance of 50 m from the gun, perpendicular to the gun barrel bore without tilt. The width of each strip on the testing target should not exceed 10 mm. When adjusted by this method, the gun should be placed so that the trunnion axis has no inclination. If the sight is adjusted correctly, the bar top will coincide with the centre of the testing target cross, provided all sight scales are in zero positions.

The mechanical sight is first examined. All its parts should be intact and reliably secured and all its mechanisms should move smoothly, without jerks and jamming, and not require great effort to turn. During preparation of the emplaced

gun for firing, the sight is partially inspected in all cases. A complete check is carried out only in case of necessity, if the combat situation permits. First the barrel and the upper end of the panoramic telescope seat is levelled with the help of a master level. The bubbles of the longitudinal and lateral levels should be in the middle position, with all sight mechanisms being in the zero positions.

Then verify the bore sighting line. First of all set all sight

and panoramic telescope mechanisms at zero. The optical axis of the panoramic telescope should be parallel to the gun barrel axis. For sighting use a distant aiming point or a testing target. The second method is not so accurate and therefore it is used only if there is no clearly visible distant point on the ground.

The night vision sight is considered adjusted correctly when its optical axis is parallel to the gun barrel bore. It is advisable to adjust the night

vision sight by the distant aiming point method, using for this purpose any clearly visible object. If there is none, the sight is adjusted by the testing target method. For this purpose, at first lay the gun barrel at the centre of the target cross and then match the zero marks of sight angle scales with index lines. The sight is adjusted correctly if the vertex of its triangle coincides with the selected aiming point or with the centre of the testing target cross, both in height and direction.

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GROUND FORCES

ROLE OF AMBUSH IN DEFENSIVE, OFFENSIVE OPERATIONS

Moscow SOVIET MILITARY REVIEW in English No 11, Nov 83 pp 22-23

[Article by Major-General L. Korzun, Cand Sc (Military): "Ambushes"]

[Text]

As a method of the forces' combat operations, an ambush is organised unnoticed for the enemy. This is achieved by a surprise attack on the enemy with the purpose of destroying him, taking prisoners, and capturing documents, samples of weapons and combat equipment. The very subunit assigned for carrying out such missions is also called an ambush. As a rule it is deployed secretly and in good time on the most probable route of enemy movement, and suddenly attacks him.

During the Great Patriotic War (1941-45) tank ambushes proved to be exceptionally effective. During the grim defensive battles at the approaches to Moscow in October 1941 the tank brigade under M. Katukov comprising only 49 tanks particularly distinguished itself. Making wide use of ambushes it fought stubborn battles against two tank and a motorised infantry divisions of the nazis. In these battles the nazis lost 133 tanks, 49 guns and as much as a regiment of infantry.

In the course of the war ambushes involving antitank weapons and other types of armament and materiel were also widely used. The tendency toward complex employment of various manpower and equipment in ambushes was not only preserved but also further developed. As a rule tanks, IFVs, APCs and various antitank weapons, including helicopters, take part in ambushes. All these considerably increase the possibilities of ambushes but at the same time complicate their organisation and control in battle.

A great role on securing the success of ambushes and the secrecy of their actions is played by reconnaissance. It defines the direction

of movement, composition and real combat capabilities of the enemy and also helps choose the most advantageous place for an ambush. Ambushes are laid on the probable routes of the enemy's movement and in places where his deployment is hampered (crossroads, road forks in forests, various natural defiles, etc).

The main means of carrying out missions in an ambush is fire from all types of weapons and particularly cross fire. Therefore, it is very important that the fire positions make it possible to create a sort of a killing ground. The choice of positions secures both the secrecy of their location and advantage in carrying out fire. Of no less importance is the fact that the terrain in the area of an ambush must prevent a quick deployment and rapid opening of fire by the enemy. When necessary, natural obstacles and obstructions are supplemented with engineer obstacles. Slashings are organised in a wood, camouflaged pits and ditches on the side of the road. Wide use is made of mine fields.

When operating in ambushes the role of independent actions and initiative considerably grows. The CO's organising creative activity and initiative is of particular importance here. As a rule, he personally chooses the site of an ambush, positions of all fire weapons, defines their missions, the primary and secondary fire sectors and the direction of fire, and establishes signals for its opening, transfer and ceasing. When necessary, he also defines the subsequent actions: direction and order of advance or withdrawal, change of

fire positions and the corresponding signals.

It is only natural that the concrete solution of each of these questions depends on real conditions and to a great extent on the type of battle during which an ambush is laid.

AMBUSH ON THE DEFENSIVE

There is the belief that an ambush on the defensive bears a passive character to a certain extent. Such an opinion is absolutely incorrect. Ambush is an extremely active method of actions on the defensive and in any other type of battle. As we can see from the above cited example, M. Katukov's tankmen scored a success thanks, first of all, to a combination of operations from ambushes with skillfully directed counterattacks of the rest of the forces. For days the brigade carried out stubborn battles, but during the night it changed positions, withdrawing in consecutive order from one advantageous line to the other. During the night ambushes were organised anew, positions developed and cooperation established.

One of characteristic features of ambushes on the defensive is their recurrence, even during one battle. Therefore, when organising combat operations several places for disposition are chosen right away for each ambush and for each tank and IFV (APC), besides primary positions, several alternate ones are assigned.

The experience of the war years showed that ambushes on the defensive are most effective when they are employed by a definite system. For example, several ambushes, located at a visual distance one from another

and in close interconnection can carry out combat simultaneously. But extremely close cooperation must be between them and the rest of the tank and motorised subunits and also with antitank weapons and artillery.

In the event of the deliberate defences ambushes can be laid in the combat security and support zone and on the forward position. In the battalion defensive areas they are organised on the flanks, in gaps between subunits and also in the depth. Thus, in a modern defence, ambushes have essentially become one of the elements of subunits' combat formations.

During the Great Patriotic War tanks and other fire means in ambushes usually opened fire from short distances or sometimes point-blank in order to destroy the targets from the first shot. The increase of fire range and armour-piercing ability of modern armament and the perfection of sighting equipment make it possible to open fire from great distances. Yet in each concrete case the range of fire and time of commencing fire must be determined with due account of the actual conditions. For example, so as not to reveal one's position prematurely it is not expedient to ambush the enemy reconnaissance. Special manpower and equipment must be detailed for the purpose. In contemporary conditions the importance of organising the terrain in the area of ambushes with engineer works and installation of obstacles, particularly

mine fields, is increasing. They must be organised so as to force the enemy to operate in columns or in dense battle formations and to enable the forces in ambushes to deliver fire at the enemy flanks.

AMBUSHES ON THE OFFENSIVE

Frequently ambushes are also used in offensive battles, particularly while pursuing a withdrawing enemy.

When pressing home the attack they are more frequently laid on the uncovered flanks for their security and also for repulsing counterattacks. In contrast to the defensive, on the offensive the role of single ambushes sharply increases. When laying them it is necessary to take into consideration that there may be no time for organising terrain with engineer works. Therefore, it is important to use natural covers to the utmost and pay greater attention to camouflage.

During fighting for the liberation of Hungary, in one of the sectors in the area of Komarno the nazis launched a counterattack. Its preparation was detected in good time and an ambush consisting of 6 tanks and 3 artillery guns was laid. The time was pressing badly, therefore Captain K. Shcherben, commander of an ambush, decided to dispose them in sheds located on hills in a separate farm and to make holes for the guns in their walls.

The enemy, failing to detect the ambush, advanced in two columns:

one comprising 8 tanks and assault guns and 15 APCs and the second one — 10 APCs. Having allowed the enemy to approach to a distance of 400-500 metres tanks and guns suddenly opened fire and immediately destroyed 4 tanks and 3 APCs. The rest turned back. A dangerous counterattack was repulsed.

During pursuit of the enemy ambushes may be used for routing subunits of reconnaissance and combat security, capturing POWs and weapons, destroying small withdrawing groups, impeding the withdrawal of the large enemy forces along advantageous routes, etc.

In the last war night ambushes were of particular importance during a pursuit. For example, a tank company under Lieutenant Vlasov was ordered to lay an ambush on a highway which remained the only route for the withdrawal of the nazis to the west. Tanks reached the place of ambush by night and disposed so as to create a killing ground. The main forces of the company were forced to engage the enemy middle tanks and assault guns when they appeared on the highway. The column was given the opportunity to penetrate deeper into the killing ground and then it was destroyed with surprise fire.

Thus, ambushes are highly effective in any type of battle, but in each case they must be thoroughly prepared with an eye to the concrete circumstances.

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GROUND FORCES

IMPROVISED MEANS FOR CROSSING WATER OBSTACLES

Moscow SOVIET MILITARY REVIEW in English No 11, Nov 83 pp 26-27

[Article by Colonel Engineer A. Malyshev: "Improvised Crossing Means"]

[Text]

In certain situations getting troops across water obstacles makes it necessary to use improvised crossing facilities along with organic ones. More often than not, such a necessity arises with small groups of servicemen acting out of contact with their subunits (e.g. in reconnaissance). Improvised crossing facilities, such as rafts are made of local materials (logs, poles, bars, brushwood, reeds and rushes, straw, hay, wood chips, dry leaves, and also plywood boxes or veneer rolls wrapped in shelter-halves, canvas, oil cloth or rubberised fabric). Barrels and thin-walled pipes are also suitable for raft making.

To interconnect individual elements of a raft together, cables, ropes, wire or plaitings of brushwood or straw are used. The plaiting is reinforced by twisting or wedges. Nails and cramp irons should not be used for fastening the raft parts to keep them from coming apart when afloat. In tying a raft together sharp edges on individual parts should be trimmed off to prevent ropes or brushwood plaitings from wearing out.

It should be borne in mind, however, that before proceeding to make a crossing facility the load-carrying capacity of the constituent materials should be assessed.

Thus, the load-carrying capacity of a pine or fir log can be estimated in the following way. The length of the log in metres is multiplied by 0.75 of the diameter (0.5 of the diameter in the event of damp timber) of its upper end in centimetres. For example, the length of a newly sawed log is 5 m, and the diameter of its upper end is 20 cm. The load-carrying capacity will then be equal to $5 \times 0.5 \times 20 = 50$ kgf. The payload of logs and barrels is taken to be 10-15 per cent less than their load-carrying capacity.

Materials like straw or dry reeds have quite an appreciable load-carrying capacity (3 kgf for 1 kg of straw, for instance). The payload of a float with an envelope of a shelter-half or canvas packed with straw, hay, dry reeds, chips and the like, is 50-60 kgf. It should be remembered, however, that reeds without an envelope are suitable for

making a raft to be used for a maximum of two hours, and straw, for not more than 1-1.5 hours.

Improvised crossing means may be of diverse varieties. If, for instance, one man has to cross to the other bank, use is generally made of two short logs tied together by ropes or four canvas bags packed with wood chips, hay or the like, with the soldier lying on the ropes between the logs or bags. One log 6-7 m long may well be used for ferrying four soldiers, each of them paddling with one hand and holding on to the perches or ropes (belts) tied to the log, with the other.

If one man is to cross a water obstacle, a raft can be made of two short logs or two bundles of poles with an improvised suspended seat in-between (Fig. 1). Floats of shelter-halves or canvas packed with straw, hay, chips, etc. can hold two to four men. In exceptional cases, when the materials are not available in the requisite quantity, uniforms and equipment with some straw or hay added may be

wrapped in shelter-halves to make a crossing facility.

A squad of soldiers can cross a water barrier on three logs with wooden boards across (Fig. 2). Longitudinal poles for the men to stand on during the crossing are tied to the logs from beneath. If logs are not available, four barrels (metal or wooden) and also canvas floats packed with straw or wood chips can be used (Fig. 3).

As all the facilities just considered have no spanning structure, their mass is relatively small, and they are easy to make. However, they have a serious drawback, namely that each soldier is three quarters deep in the water when crossing. Besides, the crossing speed with the men in a sitting position never exceeds 0.5 m/s due to high water resistance. On rivers with a quick current they will most certainly be drifted away. The drift may be roughly calculated by dividing the flow rate by the speed of the crossing facility in stagnant water and multiplying it by the river width in metres.

Rafts with spanning structures are more reliable, for they

can be used to ferry soldiers who cannot swim, and also ammunition, weapons and other loads. The most common design of such a raft presented in Fig. 4 is made of a 6-7 m log and poles for the frame, with the soldiers in a lying position.

Fig. 5 illustrates rafts of boards and logs for one or two men. They are easy to make, and their mass is not more than 100-130 kg. Rafts of floats intended for ferrying 2-4 men have proved most efficient. The floats are actually hay, straw, reeds or chips wrapped in canvas. Supporting boards with transverse poles are fastened to the floats from above, and the flooring of boards or poles is placed on top of the transverse poles. The mass of such a raft is about 100 kg.

If straw or reeds are available among the local materials, they can be used for making rafts on two fascines (bundles of brushwood) for one soldier, or on seven fascines, for four soldiers. Boards are secured to the fascines on top and bottom with wire or ropes.

Rafts of barrels are also reliable, simple to make and convenient to use. Two barrels, for example, will suffice to make a raft for two soldiers. To enhance stability on the water, such rafts are provided with special extensions. The rafts are made in the following succession. A frame is tied up of boards or poles with barrels secured underneath by means of wire or ropes. A wooden decking is then laid on top of the frame. The barrels should be of equal size and thoroughly sealed. It is preferable to far wooden barrels.

Taking a squad of soldiers across a water barrier requires a raft of 15-20 logs, 3-5 m long and 18-30 cm in diameter, with a flooring of brushwood laid on top. Such a raft is sufficiently strong, and can be used more than once.

Of the wide range of improvised crossing means, this article has touched upon the most typical cases. The choice of a crossing facility in each specific situation depends on the materials available and the time allotted to get ready for the crossing.

Fig. 1

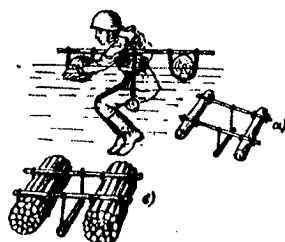


Fig. 2

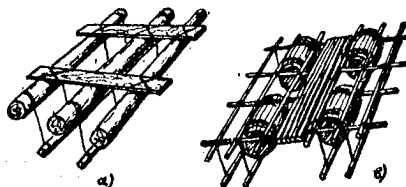


Fig. 3

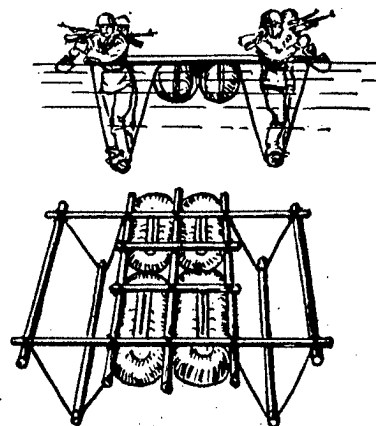


Fig. 4

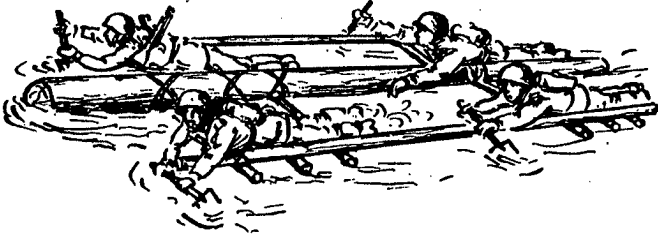
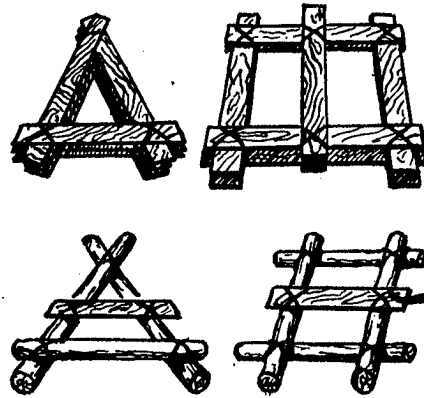


Fig. 5 ►



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AIR/AIR DEFENSE FORCES

TACTICAL TRAINING OF FIGHTER PILOTS DISCUSSED

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 pp 23-23

[Article by Colonel N. Fedotov, military pilot 1st class]

[Text]

A tactical air exercise was in progress in an air squadron. The command post had received a message that an aerial target had been detected. The "enemy" aircraft was heading at a low altitude toward the protected objective.

A pair of fighters took off to intercept the target. The pilots efficiently responded to aircraft controller's commands, skilfully combined different ways and methods of low-flying target searching, and soon managed to detect the "enemy." The leader began to close in on the target. His wingman copied his actions and was in constant readiness to engage it in combat.

The "enemy" proved to be an experienced pilot. While heading to the objective he continuously employed jamming and after ascertaining that he had been detected, performed an anti-fighter manoeuvre.

The pilots acted efficiently and competently. At first they tuned away from jamming and then the leader having made the most expedient manoeuvre for these conditions, took an advantageous attack position and "destroyed" the target.

The successful accomplishment of the mission resulted from the high training standard of the fighter pilots, their skilful use of the capabilities of the aircraft and its armament, the correct choice and use of target search and approach and attack methods. Of no less importance was the knowledge of "enemy" materiel and tactics.

It is a known fact that the tactics of modern air combat is constantly changing and improving, which is due to the adoption of new weapons systems by the armies of many countries and by the ever increasing computerisation of aviation equipment. The ability to obtain, within a short period of time, plentiful data on the situation and automation of many processes has had a telling effect

on the tactics of fighter planes. That is why it is not fortuitous that foreign military experts are now revising, drawing on the experience of combat operations in local wars and separate military conflicts, some fundamentals of the aerial combat tactics. Their attention is also focussed on comparative specifications of aircraft, combat formations used in different situations and problems pertaining to the organisation of control in battle.

But in spite of the high degree of automation of many processes, the final outcome of an engagement depends on the pilot, his ability to use in full measure the capabilities of aviation materiel and weapons, his staunchness, poise and determination to emerge victorious from combat.

The examples from combat practice and training routine testify that only those pilots who possess well-developed tactical thinking act competently in complicated air situations. This explains why great consideration is being given now to developing tactical thinking. For this purpose aviation units have special well-equipped classrooms in which tactical lessons and briefings are regularly conducted under the guidance of experienced commanders. During these lessons the pilots, considering different narratives, substantiate comprehensively the use of particular manoeuvres, the attack technique and tactical methods, and also study and analyse the combat experience gained by fighter pilots in different situations.

In training flights the pilots polish their skills, learning to handle the aircraft confidently at all flight levels and speeds. Acquiring practical skills in performing complicated manoeuvres, in displaying discretion and in spatial orientation, they cultivate a quick reaction, an ability to withstand prolonged overloading and to interact within a group. Over a tactical training range they learn how to manoeuvre in combat and use means of destruction in various conditions.

For a fighter pilot all this is a minimum of knowledge to qualify to proceed to the basic stage of training — exercises of various scales. In the course of them the pilot must fulfil a great number of complicated tactical tasks: to approach the target without disclosing himself, perform different antiradar, antiaircraft-fire and antimissile manoeuvres, maintain tactical and fire cooperation when operating as part of a group, adopt a decision to attack, etc.

Close aerial combat is particularly distinguished for its fluidity and the many surprise situations. It is in this type of combat that the fighter pilot should display the best qualities of an airman:

courage, poise, resourcefulness, military ruse, the desire to destroy the air enemy at any cost and prevent him from accomplishing his mission. Military ruse in aerial combat means the use by the pilot of non-stereotyped actions and such methods of engaging the enemy and at the same time evading his attack that are best suited to a particular tactical situation.

Tactical aerial exercises with practice firing play an especially important part in enhancing the fighter-pilot's tactical training standard, and in his acquiring and perfecting practical skills in selecting and performing appropriate flight manoeuvres in different combat situations. Such exercises allow the command to objectively assess the training level of their subordinates and the team-work of separate pairs, flights and squadrons. During these exercises they also estimate the work and tactical training standard of command and direction post specialists, because the pilots' successful fulfilment of the missions assigned depends to a large extent on their efficient cooperation with the ground personnel.

Tactical aerial exercises which involve re-deployment to other airfields, flights from these airfields and practice firing on unfamiliar training ranges make it possible to estimate most objectively the training standard as well as the political and moral state of all the categories of the personnel. This conforms to the basic principle of training — to teach the servicemen what they will need in war. That is why the training tasks planned for each specific flight should always take into account the specifics of the flight itself and the concrete air situation.

The preliminary training should necessarily include, for instance, such questions as the study of the ground situation chart, analysis of the target pattern and selection of appropriate manoeuvres ensuring the reliable destruction of these targets, determination of the best type of formation, probable actions of individual pilots in case of group rearming or breaking up. The possibilities of pre-flight training to enhance the tactical skills should be also used to the utmost. During this training the pilots specify the situation paying special attention to meteorological and other conditions which may affect the procedure and quality of accomplishing the mission. Of course it is difficult to foresee before the flight everything that may happen during combat, its probable initiation and progress. But it is possible and very important to consider the most probable variants of actions, the procedure of manoeuvring, regrouping the formation and breaking away, and to work them up while still on the ground.

To further enhance the fighter-pilots' training standard it is necessary to constantly introduce changes in the training process. For example, the flying missions should definitely include elements requiring the pilots to adopt individual, independent decisions. Thus, if a young pilot is ordered to approach the target and destroy it straightway or after exercising a simple manoeuvre, the mission can be changed when he is already in the air by informing him that, for instance, an "enemy" SAM system has been spotted in the target area. In that case the pilot will have to change his plan and to perform a more complicated manoeuvre to reliably destroy the target.

By using such narratives it is possible, for example, to turn a wingman into a leader, and in this role he will have to act independently in a newly-arisen situation, without relying on the help of a senior, to analyse the aerial and ground situation, adopt non-stereotyped decisions, conduct reconnaissance and organise fire cooperation. That is why each pilot should be prepared to play the role of a leader and, during training, determine the most expedient type of formation, the route to the training range, the methods for penetrating the air defence system, probable types of combat manoeuvres and the procedure for leaving the combat area. Discussing with his comrades these problems will help him find the best variant. Such discussions are beneficial for developing independent tactical thinking and initiative.

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ENGINE DESIGNER A. M. ISAYEV PROFILED

Moscow SOVIET MILITARY REVIEW in English No 10, Oct 83 p 49

[Text]

The name of A. M. Isayev (October 24, 1908 — June 25, 1971), an outstanding designer of aircraft and rocket engines, is associated with a glorious chapter in the annals of Soviet aviation. Jointly with A. Ya. Berezhnyak and under the guidance of V. F. Bolkhovitinov he took part in the development of the first Soviet jet fighter aircraft, the BI-1, with a liquid propellant rocket engine.

The design of the BI-1 plane was approved on the very first day of the Great Patriotic War (1941-45). The following fact is a graphic illustration of the importance attached to the work being done to produce it. Designing the engine, making blueprints and manufacturing a test airframe took only 40 days from the date the respective resolution of the State Defence Committee was signed. In the autumn of 1941 the design bureau was evacuated to the Urals, where the first Soviet jet plane was manufactured.

On May 15, 1942 the BI-1 aircraft manned by test pilot Captain G. Ya. Bakhchivandzhi soared into the sky. The maiden flight was a success, and the tests continued. Shortly after a hitherto unheard-of speed of 800 km/h was attained.

Work on the first Soviet jet plane dramatically changed Isayev's further plans and his whole life for that matter. It became evident from the outset that the liquid propellant rocket engine (designed by L. S. Dushkin) required quite a few modifications. V. F. Bolkhovitinov assigned the construction of a new engine to Isayev, who, beginning in 1942, devoted himself entirely to designing rocket engines.

Previously Isayev had worked on the reliability of survival aids during the takeoff. His engineering concepts had been always unusually bold, but at the same time justified by practical necessity. These qualities of his became still more salient at his new job.

Isayev's first RD-1 engine was started by the voltaic arc, and not by the electric coil as was the case with the BI-1 engine. This largely enhanced starting reliability, and had a number of other advantages.

In 1943 Isayev suggested that a layer of a protective non-aggressive gas at a low temperature be placed into contact with the combustion chamber walls. This idea was subse-

quently adopted for developing other engines of similar types.

Isayev's next model of a rocket engine — the RD-1M — featured a staggered arrangement of nozzles with an oxidizer and fuel, which was a bold innovation. In yet another model Isayev employed an original connection between the engine's outer and inner walls through tack-welded strips of the same metal.

In 1944 Isayev was put at the head of a large engine manufacturing agency, and became chief designer at a design bureau in 1947. The engines and propulsion systems for space vehicles developed under Isayev's supervision were installed on the manned spaceships Vostok, Voskhod and Soyuz, and on automatic interplanetary stations starting for the Moon, Mars and Venus.

The Communist Party and the Soviet Government assessed A. M. Isayev's merits at their true worth: he was honoured with the title of Hero of Socialist Labour and awarded the Lenin and State prizes of the USSR. Four Orders of Lenin, an Order of the October Revolution, and numerous medals were conferred upon him as well.

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AIRCRAFT DESIGNER A. N. TUPOLEV PROFILED

Moscow SOVIET MILITARY REVIEW in English No 11, Nov 83 pp 42-43

[Article by Lieutenant-Colonel O. Viktorov: "An Outstanding Designer and Scientist (A. N. Tupolev's 95th Birth Anniversary)"]

[Text]

Andrei Nikolayevich Tupolev (November 11, 1888 — December 23, 1972) lived a long and eventful life, devoting over sixty years of it to aircraft designing. It is nevertheless incredible how he was able to do such a gigantic volume of work even for this imposing span of time. The design bureau under General Designer Colonel-General Engineer A. N. Tupolev, Lenin and State Prize winner, three times Hero of Socialist Labour, bearer of nine Orders of Lenin — the Motherland's highest award — developed and constructed over a hundred military and civilian aircraft. The first airplane produced as a result of research and wind tunnel tests, the first all-metal flying vehicle, the first multi-engine bomber with the longest range (it was the fastest bomber at the time), the world's largest eight-engine airplane Maxim Gorky, the first Tu-16 jet bomber with swept wings, the first Tu-104 passenger aircraft, the first Tu-144 supersonic airliner—these are only the milestones in the biography of the celebrated engineer, designer and scientist. It can be said with good reason that every machine produced by the design bureau under A. N. Tupolev for more than half a century was a new and mark-

ed contribution to the progress of world aviation.

In 1908 Andrei Tupolev, the son of a provincial notary, whom nobody knew at the time, passed the entrance examinations to the Mechanics Faculty of the Moscow Higher Technical School (later named after N. E. Bauman). His difficult childhood in a family with seven children growing up and his studies at the secondary school were behind him and years of strenuous work and world renown lay ahead.

One of his teachers at the School was N. Ye. Zhukovsky, the founder of modern aerodynamics, under whose guidance the second-year student built a wind tunnel and carried out a series of experiments on it. Tupolev took part in the construction of a biplane glider and even piloted it. Zhukovsky predicted a great future for Tupolev. In 1911, however, he was arrested and expelled from Moscow under secret surveillance of the police for his participation in revolutionary action against tsarist autocracy. Only three years later, on the eve of the First World War, he was allowed to return to Moscow and continue his studies at the School. Mastering the curriculum persistently, he drew

blueprints of a wind tunnel for the central scientific and technical laboratory in Petrograd (now Leningrad). Even before he received his engineering diploma Tupolev was offered a job as head of the seaplane department of the Duks Aircraft Manufacturing Plant in Moscow, and some time later, of the design bureau at the aircraft design and test bureau attached to the Air Fleet Administration.

During the grim years of the Civil War (1918-20) and rehabilitation of the national economy, when machine-tools, instruments and materials were in short supply, the foundations of the Soviet aircraft industry were being laid. On December 1, 1918, the decision was taken to establish a Central Aerohydrodynamic Institute (TsAGI), which subsequently became the main centre of aviation science and technology in the USSR. The project of the Institute was drawn up by Zhukovsky and Tupolev and approved by V. I. Lenin. Beginning in 1918 Tupolev was the TsAGI's deputy chief for nearly two decades, and from 1922 he simultaneously discharged the functions of chief of the design bureau he himself organised within the TsAGI framework.

All those who knew Tupolev intimately or worked by his side

noted such qualities as his sense for the new and a constant striving to be ahead of his time. Keeping abreast of the latest scientific and technological achievements, he introduced them resolutely into aircraft manufacturing. When a light and durable duraluminium-type alloy was obtained, Tupolev lost no time in designing an aircraft with a rigid cantilever wing. The combined-type ANT-1 and all-metal ANT-2 planes (1924) determined further prospects for manufacturing metal airplanes.

The first Soviet production all-metal sesquiplane, the ANT-3 (P-3), brought Tupolev world-wide recognition. In 1926 it took M. Gromov's crew three days to fly to the capitals of Germany, France, Austria and Poland on the ANT-3 type Proletary aircraft. Some time later Pilot S. Shestakov made a hitherto unheard-of 22,000-km flight from Moscow to Tokyo and back. For a long time the ANT-3 was in service with the Soviet Air Force as reconnaissance, assault and communication planes.

Seventy types of aircraft designed under Tupolev's guidance were mass produced in the country. His machines made 28 unique flights, which drew comment by the mass media in all countries at the time. People closely watched the rescue of the Chelyuskin crew on the ANT-4 (1934), non-stop flights from the USSR to the USA via the North Pole by V. Chkalov's and M. Gromov's crews on the ANT-25 (1937), and the flight to the North Pole on the ANI-6 (1937) to land the scientific expedition headed by Academician O. Schmidt.

Andrei Tupolev's contribution to the victory over Nazi Germany in the Great Patriotic War can hardly be overestimated. The TB-1, TB-3, SB, TB-7, MRD-6, MTB-2 and Tu-2 pla-

nes, and also the motor torpedo boats G-4 and G-5 he developed took part in numerous air and sea battles.

The high-speed twin-engine SB (ANT-40) bomber designed by A. Arkhangelsky's team under Tupolev's supervision and used in the initial period of the war developed a speed of 450 km/h (some 150 km/h faster than similar foreign machines), and was practically inaccessible to fighters and almost invulnerable to fire by the enemy anti-aircraft artillery.

The high-speed TB-7 bomber took off for the first time late in 1936. Modernised by V. Petlyakov later on, this plane, designated Pe-8, was used for raiding deep in the enemy rear, including Berlin. Its bomb load, speed and range exceeded those of American Boeings (B-17) and German Focke-Wulfs (FW-200).

In September 1942 several Tu-2 planes appeared on the Kalinin Front. In 1944 the Soviet aircraft manufacturing industry began their mass production. As regards speed (550 km/h) it surpassed by 100 km/h the Ju-88, the Luftwaffe's main bomber. Front-line flyers assessed highly the Tu-2 for its reliability and powerful airborne armament.

In the postwar period Tupolev developed the Tu-12 and Tu-16 military planes, and the Tu-104 and Tu-114 airliners which won universal acclaim; these were followed by the Tu-124, Tu-134, Tu-154 and the world's first supersonic passenger aircraft, the Tu-144.

How can yet one explain the fact that such formidable work was done under the guidance of one man? Answering this question, A. Arkhangelsky, Hero of Socialist Labour, emphasised Tupolev's three most characteristic features: first, his constant striving to merge theory and

practice; second, his independent and thoroughly substantiated point of view on any technical matter; third, his amazing perspicacity based on his vast knowledge, an aptitude for analysis and the ability to foresee the ways of development of not only aviation, but also of related branches of science and technology. We can fully rely on Arkhangelsky's estimate of his teacher, with whom he worked side by side for nearly half a century.

Tupolev himself ascribed his success to his unity with the collective — the brilliant scientists, designers, engineers and workers who surrounded him. Tupolev not only relied on them, he saw to it that they were promoted regularly, and helped them upgrade their knowledge. It is not fortuitous that his design bureau produced V. Petlyakov, P. Sukhoi, V. Myasishchev and A. Arkhangelsky, who subsequently set up their independent bureaux.

Tupolev was a great scientist who laid the foundations of aerodynamic and structural design. The Royal Aviation Society in Great Britain (1970) and the American Institute of Aviation and Astronautics (1971) considered it a great honour to elect him an honorary member. He was awarded the Zhukovsky medal "For the Best Work in the Theory of Aviation," the Great Gold Medal of the International Aeronautic Federation (FAI), the Leonardo da Vinci Prize (Italy), and the Gold Medal of the Founders of Aviation (France).

The Soviet people cherish the memory of this outstanding scientist and designer. In recognition of his merits in the development of aeronautics the Presidium of the USSR Supreme Soviet has instituted the Tupolev Gold Medal.

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NAVAL FORCES

NEED TO MAKE SEA DUTY MORE ATTRACTIVE

Moscow KRSNAYA ZVEZDA in Russian 20 Nov 83 p 2

[Vice Admiral V. Smaragdov, chief of cadre headquarters for the Red Banner North Fleet]

[Text] Every year officer strength in the navy is replenished with graduates of naval schools. I had the opportunity to talk with many of them about their views on naval service and their aspirations and plans for life. How pleasant it is to see before you a young lieutenant full of the joyful sensation of his own strengths and outlook, the wish to spend as much time as possible on ships and to travel the difficult road to command. And as a rule after their assignment to ships they credibly justify the command's great confidence. They quickly assimilate their specialty and pass the examination for independent management, in this way displaying diligence, organization, discipline and responsibility for the task assigned. They actively participate in the work of the Party and Komsomol organizations and in the ship's social life and know the complicated science of training and indoctrinating subordinates. The result is their achievement in military and political exercises which are estimated at their own worth.

Thus for model fulfillment of his service obligation, graduate of the Officer Naval Submarine Training School imeni Leninist Komsomol Senior Lieutenant A. Stakheyev was awarded the order "For Service to the Motherland in the USSR Armed Forces" 3rd Class. Senior Lieutenants V. German and A. Alifanov, Senior Engineering Lieutenants V. Isayev and K. Isakov and Lieutenant K. Dushenov received medals "For Military Service." And there are many such officers among recent school graduates.

But unfortunately in recent years you once in a while meet lieutenants who at the mention of service aboard ship, or about the captain's bridge look aside in embarrassment; lieutenants who have not experienced the joys and difficulties of shipboard life, yet who already dream about shore duty and discuss the advantages of a serene and measured life. Thus Lieutenants A. Dmitriyev and A. Kasparyevich who graduated with honors from the Caspian Naval Officer Training School imeni S.M. Kirov in 1983 expressed the wish to serve on shore.

What causes this? Is this the consequence of a poor quality selection process in the schools? Is it the result of negligence in cadet training and education? It's difficult to say. It is however, clearly evident that although these are rare instances among individual young officers thrown into the navy, they are manifestations of essential deficiencies in their training.

But before complaining about the schools, one should consider this: are we in the navy doing everything we can to make the captain's difficult position as attractive as possible to officers? Are we creating the very atmosphere throughout the units and crews that would prompt officers to select command duty? Is there high prestige for the captain's bridge in all the units and ships?

Possibly there are those who think these questions far-fetched. Indeed our captains have not missed their share of attention. It is sufficient to say that in the Northern Navy several of them were awarded with the high rank of Hero of the Soviet Union in peace time. In the first place they receive the next military rank ahead of time and their names are well known. For example, the whole navy knows such foremost commanders as Captain 1st Rank B. Popov and Captain 2nd Rank V. Lopatkin.

Glory and popularity are undoubtedly sufficient award for a captain's difficult job. But the prestige of this or that profession, including the profession of ship's captain is determined not only during parades and holidays. It is primarily determined by the daily relationship to the job. And this is where, in my opinion, everything is not going well for us.

Individual officials lack the foresight, consistency and tact in working with command cadre. This is how it is. Much is said about the special predestination of a ship's captain and that he is a central figure in the navy, but sometimes they treat the authority of people holding this position with improper lightness.

During an inspection of the ships in one of the units, the naval staff officers ran into just such a situation. Senior chiefs confidently named the foremost navigators, engineer-mechanics and rocketmen. But, judging by their replies, the foremost commanders were not evident in the inspected ships. Of course it wasn't the fact that all commanders there were not selected with serious deficiencies, but that some of the officials, and in particular the former division commander officer V. Gridasov did not use entirely correct work methods with them. Without carefully studying and analyzing the real reasons for miscalculations and negligence against which no one is immune on the whole, and without the exposing specific culprits, the officer exposed the commanders to dressings down in front of subordinates and gave punishments on the slightest grounds.

There is no argument that there must be special, greater demands on a commander. He is in essence responsible for everything that is done in his crew. But, in asking the full measure from him, we do not have the right to forget that the high demands must elevate and not lower the figure

of the commander? At the same time the commander himself, striving thus to fulfill his own responsibilities, must be concerned about this so that it will satisfy both himself and his senior officers.

I recall with great warmth my own command years and the senior officers, now Admiral B. Yamkovi and Vice-Admiral M. Proskunov, with whom I had the occasion to serve in those years. They treated their ship commanders and executive officers with such tact and consideration. They deeply understood and were convinced of the fact that working with this category of officer personnel was their most important mission. And there were no unimportant questions. With the same deep passion they taught us the art of managing a ship and the ability to educate subordinates, to use weapons and conduct military life. They educated us in the spirit of naval romance and adherence to the commander's calling. We constantly felt their comradely help and support, sensed the esteem of those around us, the high social value of our military work and tried ourselves in every possible way to be worthy of the high trust of the Motherland--to command ships.

Doubtless that careful attention to the commander and understanding of his problems and concerns are necessary not only for the service successes of an individual officer. Behind this is also a factor of the long-term educational effect on those who are preparing to become commanders, and the active influence on the attitudes in the officer environment and in the crew.

In this regard the work style of Vice-Admiral V. Poroshin, the navy's first to wear all three degrees of the award "For Service to the Motherland In the Armed Forces of the USSR," is noteworthy. Having completed the extensive and difficult command school himself and being a commander, he treated ship captains with surprising sensitivity and concern. Poroshin never forgot that a good, diligent ship captain should be encouraged at the right time and advanced in service. If he felt that one of the officers had suffered some injustice, he boldly and decisively stood up for him. He also persistently fought to defend even those who were at fault for something, educating and opening them to his trust. And it was no accident that ship captains that served under Vasiliy Alekseyevich's command were for the most part bold, independent and confident in their ability and the lieutenants who served under their command as a rule looked not at shore duty but to the captain's bridge.

In talking about the road to the captain's bridge and its prestige, it is impossible not to touch upon the problem of who should be selected for this position and how should it be done. If an officer becomes a captain deservedly, having proven his right to this position by conscientious service in past assignments, and especially in the deputy chain as a deputy commander and executive officer, he himself in a short time finds great prestige in the eyes of others and by his example elevates the prestige of captain's rank. But the exact opposite occurs when the crew is headed by an officer for whom the captain's bridge is only the next step in service, a step which must be quickly rushed through to further a career. There are people in the captain's position whose very ability and quality of work

do not conform to the complicated volume of responsibility. Such assignments are not to the service's advantage.

In this regard I want to underscore the responsibility of captains, staffs, political and cadre agencies in selecting and promoting officers to deputy commander and executive officer assignments. Here the proverb "As you sow, so shall you reap" is very appropriate. Deputy positions will be thoughtfully filled with officers, their purposeful educational work and effective training will be organized and this will create a reliable reserve of candidates to fill the offices of ship's captain.

Yes, the road to the captain's bridge is steep and difficult and to travel it requires someone frank and honest. From time immemorial a ship captain's post in the navy has been surrounded with a halo of special romanticism, of special honor and respect. Our duty is to do everything to keep this so in the future. The captain's bridge is high. Its prestige must be equally high.

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CSO: 1801/117

NAVAL FORCES

RESPONSIBILITIES OF SHIP'S, SPECIAL WATCH OUTLINED

Moscow SOVIET MILITARY REVIEW in English No 11, Nov 83 p 28

[Article: "What Is a Ship's and Special Watch Appointed For?"]

[Text]

Aboard warships, the watch is a specific form of duty. A watch is appointed, whenever it is necessary to display constant vigilance and to remain constantly at an action station. Depending on the purpose, it may be a regular ship's watch or a special watch.

A ship's watch includes an officer of the watch, his assistant (aboard first rank ships), commanders of watch stations, an armed orderly at the gangway, a commander of a lifeboat, a boat watch keeper, a mooring line man and a messenger of the watch.

The officer of the watch is directly responsible for the maintenance of the established state of readiness, of the ship's external safety, and for proper execution of watch duties by the personnel. When the ship is underway the officer of the watch comes under the commanding officer or the executive officer, when the latter is on the bridge in place of the commanding officer. When the ship is at anchor, he comes under the executive officer and duty officer of the ship. The Navy Regulations lay down that no person other than the above and their direct superiors has the right to countermand the orders of the officer of the watch. As the officer responsible for the external safety of the ship, he

will take measures to prevent accident situations. Therefore, the officer of the watch carefully monitors execution of duties by the visual and technical observation stations. It is his duty to see that the ship shall pursue the set course, maintain the set speed and retain her station in the formation order. In the event of an accident he will forthwith sound the action stations signal. And until the commanding officer or his deputy arrives on the bridge he will be in charge of all damage control operations. In the event of an enemy surprise attack the ship will use her weapons for self-defence on orders from the officer of the watch.

Of course, being in charge of these duties and missions implies a definite level of knowledge and practical skills. As the immediate assistant of the commanding officer, the officer of the watch executes manoeuvres, evades attacks of submarines, aircraft, motor torpedo boats, and also detected torpedoes or floating mines.

At anchor the officer of the watch sees that regulation order is maintained on the upper deck. He sees to it that ship's motor boats and rowing boats are properly used. It is his duty to dispatch and receive them and observe the boarding of boats by the men. He demands that

the personnel observe the ship's regulations, wear the set uniform, and maintain order and cleanliness on the upper deck and the sides of the ship. The officer of the watch observes the procedure for the raising and lowering of the ship's colours, and the switching on and switching off of the ship's anchor lights.

The watch station commanders also look after the external safety of the ship, as well as of the ship's craft and rowing boats alongside, and see to it that the upper deck is kept in proper order and is clean. They also observe the people coming aboard and going ashore. The commanding officer may issue a special order to appoint an armed orderly for the protection and defence of the ship, who is posted at the gangway. In the event of an attack on the post he is defending, or in the event of fire or an alert, he will carry out the instructions on the use of arms.

On the ship's watch there are no stations of secondary importance. Every member of the crew carries out his watch duty with a lofty sense of responsibility.

Take, for instance, the duties of the messenger. Being at the disposal of the ship's duty officer and officer of the watch, he delivers information or missions to specified persons, when such information cannot be transmitted via the ship's intercom channels. To carry out his duties efficiently he must be quick, he must know the location of all the

rooms aboard the ship and the procedure for the use of the ship's intercom system.

Being on special watch duty is both a responsible and honorable mission. A special watch is appointed for the operation of functioning weapons or equipment in all the ship's departments and services, both underway and at anchor. The

personnel on watch at weapons and weapon control instruments, at working mechanisms and devices shall act in strict compliance with standing operating procedures and manuals. Efficient action by watch personnel helps maintain a high level of combat readiness aboard the ship and ensure safe navigation.

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STRATEGIC ROCKET FORCES

STRATEGIC ROCKET FORCES PROFILED

Moscow SOVIET MILITARY REVIEW in English No 11, Nov 83 pp 16-18

[Text]

The Strategic Rocket Forces are the youngest armed service in the Soviet Armed Forces and intended for carrying out strategic missions by delivering nuclear missile blows at vital military objectives located deep in the enemy rear. They are provided with ballistic missiles possessing high accuracy, powerful destruction power and practically unlimited range.

The Strategic Rocket Forces include: missile units and formations, research institutions, military scientific establishments, and units of supply and maintenance.

The Strategic Rocket Forces are headed by the Commander-in-Chief — Deputy Defence Minister of the USSR.

The creation of the Strategic Rocket Forces was a forced retaliatory measure undertaken by the Soviet Union amidst the growing aggressiveness of imperialism and the threat of the employment of the nuclear weapon.

After the Second World War the ruling circles of the United States of America began to play power politics with the USSR. This policy was accom-

panied by the arms race, atomic blackmail, knocking together anti-Soviet blocs, and the threat to deliver "preemptive blows" at the countries of the socialist community. To ensure its own security and eliminate the US nuclear monopoly, the USSR had to create its own nuclear weapon. The Central Committee of the Communist Party and the Soviet Government worked out an extensive research programme envisaging the stage-by-stage development of the ballistic missiles with a considerable range.

On October 18, 1947 the first long-range missile was successfully launched. The experience accumulated in upgrading it served as the basis for the further development of rocketry and missile units. The first rocket unit was activated on the basis of a Guards regiment of rocket artillery. The majority of its officers were participants in the Great Patriotic War and knew well the techniques and tactics of employing the Guards rocket mortars — the famous "Katyushas." Later on other rocket units began to be activated which made up the General

Headquarters reserve and served as a sort of experimental-operational basis for rockets coming into military service. These units furthered the timely ascertaining of the most acceptable organisational structure and helped to find the most effective methods of using the rockets in combat and also of training the personnel for the rocket forces.

As a result of a deep Marxist-Leninist analysis of the international situation and an all-round appraisal of the economic and industrial capabilities of the country, the CPSU Central Committee and the Soviet Government, considering the strategic nuclear weapon as the main weapon of imperialism's aggressive intentions, took a decision to form a new armed service of the Armed Forces — the Strategic Rocket Forces. This decision was promulgated in January 1960 from the rostrum of the USSR Supreme Soviet.

Various courses of the command, staff and engineer profiles were organised for training the personnel and later on middle and higher military educational establishments were formed. As the nuclear

weapon was developing, the material and technical base of the Rocket Forces, the system of training and education of the personnel, the style of work of the control bodies, organisation and performance of combat duty improved. The combat readiness of all echelons of the Strategic Rocket Forces was enhanced. Simultaneously their organisational structure continued to improve and the level of training of the personnel was upgraded.

A modern training base was created in units and formations. The military educational establishments have become large training and scientific centres manned with professorial staff and equipped with the up-to-date samples of missile weapons and combat equip-

ment. Along with training the officer personnel they carry out scientific research into maintenance of missile equipment, combat employment of rocket formations and their combat readiness.

The Strategic Rocket Forces are units and formations of constant combat readiness. They vigilantly safeguard peace. Around-the-clock combat duty was organised in these units. Year in, year out the quality of combat training and political education of the personnel is improving and the number of subunits, with excellent results in combat training and political education growing.

Besides the Strategic Rocket Forces there are the Rocket

Forces of the Land Forces which together with the field artillery constitute the arm of the service called the Rocket Forces and Artillery. Depending on the tactical and technical characteristics of missiles in service they are divided into units and formations of operational-tactical and tactical purpose. They are provided with guided and unguided ballistic missiles having a tremendous destructive power, high accuracy and reliability.

By a Decree of the Presidium of the USSR Supreme Soviet on November 17, 1964, the Rocket Forces and Artillery Day was established. It is marked annually on November 19.

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CIVIL DEFENSE

COMMAND-STAFF EXERCISE AT PLANT, POOR PREPAREDNESS OF SOME OFFICIALS OUTLINED

Moscow KRASNAYA ZVEZDA in Russian 22 Nov 83 p 2

[L. Matviyets, retired major, deputy general director for civil affairs in the Kiev Automatic Machine Tool Plant imeni Gor'kiy]

[Text] The civil defense control point at the Kiev automatic machine-tool factory imeni M. Gor'kiy is unusually crowded. Commands ring out, reports are heard, signal lights are blinking. A command-staff exercise has begun. How will it go? What training level in resolving civil defense missions will the leadership elements reflect?

A command-staff exercise is one of the training phases of civil defense in the factory. By this time the program for training commanders and soldiers of the non-military organizations is completed. The results of the final exercise conducted in all the commands and groups on the whole went well. This was facilitated for the most part by the fact that all civil defense exercise leaders in our factory underwent special training on the courses and the course of instructors. The troops of the non-military organization demonstrated good practical skills in the control trainer. In particular N. Yakovenko, V. Sventsovskiy, Yu. Aleshin and many other civil defense activists were prominent. These are our foremost production workers and right-wing contenders for meeting the plans of the 11th Five-Year Plan ahead of time.

At the same time during the period of training for the command-staff exercise many deficiencies came to light. For example it became apparent that several officials didn't know their civil defense responsibilities well and hadn't prepared for the exercise with the necessary responsibility. In this regard an expanded Party Committee session was called to hear the accounts of several communist-leaders concerning meeting their responsibilities in civil defense. All the service chiefs and commanders of the non-military organizations were invited to the session. Among those heard was communist P. Mitlenko. He was responsible for communications and notification services within civil defense. Also heard were comrades V. Gridasov, V. Kozel and V. Tsyporenko.

There were Party meetings in all the shops and sections and the agenda was increasing communist responsibility for the training quality and conduct of command-staff exercises. All those concerned with this important matter, which is called doing something in a negligent manner, were issued a strict Party demand. The Party Committee, headed by Yu. Savel'yev, persistently struggled to meet the party-political work planned for during the period of training for the command-staff exercise. This plan envisioned in particular explaining the complexity of the contemporary international situation which increased military danger. In the final calculation this work had to promote and increase factory workers' responsibility for the quality of their work and increased labor productivity. The closest goal was mobilizing people to model fulfillment of all missions assigned during the exercise. Following the line of the Party Committee the enterprise administration undertook the necessary measures.

And then the exercise. The factory civil defense leader and General Director V. Kal'chenko opened the hearing of service reports on the readiness of executing civil defense measures. P. Mitlenko gave the first report. It was clear and laconic. The communications and notification service which he headed during the exercise worked harmoniously and without breaks. All the necessary documents were completely worked. It seemed that Petr Ivanovich understood the real significance of civil defense measures well and fully recognized his personal responsibility for their organization in his section.

Other service chiefs successfully managed their responsibilities as well. Within the exercise, special attention was focused on the morale-psychological training of personnel and their development of habits in rescue and accident-repair work. As a result, according to the conclusions of the regional civil defense staff, the command-staff exercise was a success. It is worth noting the outstanding work of comrades L. Zemskaya, V. Nen'ko, A. Shcherbina, V. Kobeletskiy and others.

This command-staff exercise was an important phase in improving civil defense in this factory.

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MILITARY EDUCATIONAL FACILITIES

ENTRANCE REQUIREMENTS FOR MILITARY GRADUATE WORK OUTLINED

Moscow KRASNAYA ZVEZDA in Russian 18 Nov 83 p 4

[Editorial, no author, city given]

[Text] The KRASNAYA ZVEZDA editorial staff receives a lot of requests from readers for information on enrollment into military graduate work. Officers V. Zernov, A. Chernyayev, K. Stankevich and others specifically asked about this.

At the request of the editorial staff the Chief of Headquarters, Main Cadre Headquarters of the USSR Ministry of Defense, Lieutenant General A. Mironov is answering the readers.

Military graduate institutes accept officers who are on active duty in the Armed Forces and who have a higher education (military, military specialty or completed a civilian VUZ [institution of higher education]), have at least two years of practical experience in an officer position after completing the VUZ and have a calling for instructing or scientific research work, are politically mature and have a spotless moral record.

With the recommendation of the councils of military training institution (the faculty) military graduate institutes can accept officers directly after they have finished VVUZ [military institution of higher education] if they have at least two years of officer experience prior to entering the VVUZ, showed good ability in studies and an inclination toward scientific research or instructing.

The operational-tactical faculty of military schools are staffed primarily with officers from deputy regimental commander assignments, their equivalent or higher, and the cadre of tactical departments in VVUZ are staffed by deputy battalion commanders, their equivalent or higher.

Resident military graduate work is open to officers under 35 years old, but those with an operational-tactical specialty and party-political work can be up to 38. In the correspondence courses officers are accepted up to 40 years old. The length of training in the resident course may not exceed three years and in the correspondence course, the four years.

The application for enrollment into military graduate work is given to the commands by 1 February of the entrance year. Sent together with the report are: a list of published scientific works and inventions (officers without scientific works and inventions present scientific papers on selected subjects); a certified copy of the diploma on completing VUZ and an extract from the examination record; service and Party-political (komsomol) references; a health certification with an indication of the ability to study at the college; an extract from the protocol session of the VVUZ council (for officers entering directly from military training institutions); a certification on taking the candidate exams stipulated by the given specialty (for personnel who completely or partially took candidate exams); and service card.

Officers who earlier took graduate training within the established time may not apply a second time. The decision on admittance or denial to the entrance exams for graduate work is made by the VVUZ or NIU [scientific research establishment] entrance commission after regarding written essays or presented scientific works. Those entering post-graduate work must be notified of the decision no later than two months before the exams begin.

Permission to take the entrance exams for post-graduate work gives, in addition to the usual leave, an additional 30-calendar days of leave and a monetary allowance to prepare for and take the exams. Those entering graduate work who have partially taken candidate exams and who do not have to take the corresponding entrance exams will repay the supplementary leave on the basis of ten days for each discipline not taken. Additional time is added to the leave for train travel from place of assignment to the VVUZ or NIU and return and includes the monetary allowance.

Those accepted into graduate work without taking entrance exams do not have the right to the supplementary leave. Officers who earlier used the supplementary leave to prepare for and take entrance exams for graduate work are not permitted a second such leave. Notification of admittance to take the exams, with the signature of the head of the VVUZ or NIU, constitutes documentation attesting to the right to take the supplementary leave. Entrance exams for graduate work are held annually for a period of 30 days from 1 June through 30 August and the VVUZ's and NIU's.

Those entering post-graduate work take competitive entrance exams to the extent of the VVUZ program by special discipline, history of the CPSU and one foreign language (English, French, German, Italian or Spanish). Entrance exams by special discipline must precede exams in other disciplines. Retaking exams is not permitted.

Officers who took all the candidate exams stipulated by specialty that are used as admission criteria into graduate work are excused from entrance exams upon entering graduate work and have preference in enrollment. Those who partially took candidate exams (by specialty and foreign language) at their personnel request and with the decision of the admissions commission can be excused from taking entrance exams in the corresponding discipline. In this case they are evaluated with those taking the exams.

Candidate exams by special discipline as a rule must be taken at the VVUZ or NIU whose graduate program the officer wants to take. Those partially taking candidate exams and those with scientific works and inventions are allowed to take candidate exams instead of entrance exams in the period from 1 June through 30 August.

More detailed information can be obtained at the staff and cadre agency of the unit, institution and military school.

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END